

R version 4.4.0 (2024-04-24) -- "Puppy Cup"  
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Platform: aarch64-apple-darwin20

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[R.app GUI 1.80 (8376) aarch64-apple-darwin20]

[History restored from /Users/alperkaragol/.Rapp.history]

```
> # Load necessary libraries
> library(ggplot2)
>
> # Given data
> x10 <-
c(0.8255,0.8161,0.8302,0.8979,0.8312,0.8174,0.7616,0.5319,0.5952,0.7722,0.5177,0.3788,0.3827,0.6425,0.2157,0.3378,0.
2449,0.2911,0.9377,0.9401,0.8324,0.9516,0.8923,0.9155,0.8958,0.801,0.8656,0.9559,0.8261,0.6915,0.8009,0.882,0.5534,0.
5188,0.4166,0.5028,0.8929,0.6325,0.6194,0.6427,0.7078,0.5041,0.237,0.1452,0.5404,0.9389,0.9547,0.8842,0.9758,0.8161
,0.917,0.9353,0.3433,0.5157,0.966,0.8736,0.784,0.8755,0.8318,0.7998,0.5021,0.389,0.7264,0.9585,0.9307,0.9295,0.8993,
0.7739,0.8969,0.8423,0.4937,0.858,0.9799,0.9857,0.9384,0.9895,0.937,0.9733,0.9669,0.7165,0.8447,0.959,0.9433,0.8916,
0.9095,0.725,0.8856,0.8308,0.6972,0.8313,0.9787,0.9805,0.9365,0.9792,0.9447,0.9686,0.954,0.8703,0.9196,0.9694,0.9209
,0.9414,0.8983,0.7762,0.8797,0.8364,0.481,0.8901,0.941,0.8139,0.7159,0.8389,0.774,0.7322,0.3417,0.2374,0.6922,0.9866
,0.9894,0.957,0.9911,0.9528,0.9768,0.9767,0.6762,0.7462,0.9579,0.8046,0.6731,0.8353,0.845,0.6927,0.382,0.3016,0.6772
,0.9106,0.949,0.878,0.9676,0.7552,0.9111,0.9234,0.1419,0.1875,0.9566,0.9706,0.8404,0.9757,0.8864,0.9256,0.9321,0.581
8,0.7531,0.9326,0.8283,0.6147,0.8533,0.765,0.7218,0.3639,0.2509,0.43,0.9697,0.9573,0.8814,0.9624,0.9229,0.9063,0.914
8,0.7818,0.8495,0.9564,0.9357,0.8183,0.8385,0.7087,0.8094,0.7437,0.7703,0.6319,0.9715,0.8715,0.6457,0.8171,0.88,0.63
14,0.6242,0.4621,0.5934,0.768,0.6383,0.5715,0.4107,0.3322,0.4598,0.3147,0.1863,0.4697,0.9801,0.9159,0.7905,0.8894,0.
8982,0.7759,0.6886,0.5706,0.7397,0.9284,0.8253,0.6206,0.8201,0.6969,0.6924,0.2025,0.1933,0.5449,0.9704,0.9791,0.9192
,0.9848,0.9122,0.9569,0.9575,0.4979,0.6512,0.943,0.8671,0.7163,0.8842,0.7652,0.7811,0.2631,0.2144,0.6021,0.979,0.984
6,0.9439,0.9887,0.9168,0.9677,0.9709,0.42,0.5357,0.9689,0.8589,0.6684,0.8628,0.8505,0.6858,0.5278,0.5422,0.7134,0.97
33,0.9783,0.9392,0.984,0.9279,0.9647,0.9604,0.6099,0.6866,0.9902,0.9932,0.9598,0.9929,0.9657,0.9868,0.9776,0.8616,0.
9229,0.9508,0.9607,0.7805,0.956,0.8548,0.9085,0.891,0.6023,0.7325,0.9766,0.886,0.7492,0.8666,0.9021,0.7803,0.7795,0.
7198,0.8121,0.2779,0.1502,0.1036,0.1146,0.1869,0.705,0.1332,0.123,0.1919,0.9758,0.9536,0.9665)
> x11 <-
c(0.9111,0.8063,0.9298,0.8868,0.7812,0.9391,0.9897,0.9929,0.9569,0.9943,0.962,0.9845,0.9777,0.7416,0.8663,0.9922,0.9
938,0.954,0.9923,0.9649,0.9836,0.9708,0.7615,0.8307,0.9917,0.993,0.9549,0.9945,0.9687,0.9796,0.976,0.6863,0.8337,0.9
708,0.9736,0.9399,0.9597,0.7224,0.9397,0.925,0.5297,0.8591,0.9836,0.9862,0.9447,0.9884,0.9372,0.969,0.9652,0.4629,0.
5703,0.9341,0.603,0.6624,0.7371,0.6877,0.5838,0.4089,0.3015,0.8287,0.8348,0.5057,0.2516,0.303,0.5572,0.18,0.3411,0.2
938,0.3104,0.6851,0.7947,0.6992,0.8743,0.6118,0.7855,0.7439,0.3932,0.4927,0.344,0.2954,0.2312,0.228,0.1358,0.1945,0.
1548,0.1197,0.2809,0.9477,0.9541,0.9014,0.976,0.8976,0.9335,0.9248,0.7596,0.8873,0.9719,0.9804,0.9617,0.9918,0.9835,
0.9809,0.9517,0.9448,0.9671,0.4567,0.241,0.2962,0.329,0.4281,0.1472,0.2107,0.1191,0.3485,0.9809,0.9707,0.9403,0.9901
,0.983,0.9707,0.9551,0.9284,0.9113,0.9757,0.8984,0.8278,0.8857,0.9097,0.6807,0.5748,0.4185,0.5797,0.9932,0.9461,0.93
63,0.9763,0.9745,0.8859,0.7981,0.6225,0.8786,0.9965,0.9975,0.9856,0.999,0.9849,0.9912,0.993,0.8362,0.9252,0.9976,0.9
922,0.9933,0.9923,0.9815,0.984,0.9835,0.8913,0.9562,0.9962,0.9956,0.9852,0.9985,0.9915,0.9908,0.9895,0.9048,0.902,0.
9981,0.9933,0.996,0.9948,0.9888,0.9893,0.9877,0.9614,0.9866,0.8687,0.4715,0.7201,0.4828,0.7478,0.2953,0.7517,0.5426,
0.7652,0.9985,0.9989,0.9909,0.999,0.9968,0.9977,0.9954,0.9961,0.9977,0.9905,0.9884,0.9591,0.9931,0.9804,0.9822,0.976
2,0.8912,0.8653,0.9861,0.9179,0.926,0.951,0.9208,0.8687,0.5904,0.2406,0.9278,0.9752,0.9085,0.8558,0.9351,0.8859,0.81
84,0.4401,0.2315,0.7301,0.9974,0.9975,0.9886,0.9987,0.9913,0.9937,0.9928,0.8822,0.9135,0.9892,0.9588,0.9145,0.9745,0.
9588,0.9032,0.5809,0.3455,0.8266,0.9946,0.9954,0.9749,0.9982,0.9816,0.9897,0.9906,0.8873,0.9576,0.9883,0.9625,0.886
1,0.9772,0.9375,0.9114,0.6131,0.4078,0.7777,0.9331,0.8522,0.6172,0.8418,0.7925,0.6272,0.3451,0.2852,0.3669,0.9684,0.
8582,0.8506,0.8838,0.9168,0.6636,0.6447,0.3862,0.847,0.9935,0.9802,0.9699,0.9942,0.9908,0.9696,0.9752,0.9793,0.9843,
0.9873,0.9817,0.9614,0.9796,0.9372,0.9553,0.9375,0.9483,0.8473,0.9616,0.7679,0.652,0.656,0.8342,0.3477)
> x12 <-
c(0.554,0.3905,0.61,0.9715,0.9006,0.8303,0.9089,0.9132,0.7195,0.4507,0.2721,0.6858,0.9978,0.9854,0.9825,0.9889,0.988
5,0.9576,0.8939,0.6155,0.9547,0.9947,0.9943,0.9764,0.9973,0.9787,0.9866,0.9866,0.6866,0.6583,0.981,0.953,0.8894,0.96
68,0.9199,0.8924,0.4244,0.2538,0.7413,0.9983,0.9985,0.9925,0.9991,0.9931,0.9954,0.9953,0.8384,0.814,0.9917,0.9568,0.
8935,0.9743,0.9477,0.8819,0.6182,0.4704,0.8466,0.9961,0.9966,0.9909,0.9982,0.9915,0.9936,0.9937,0.9333,0.9203,0.9986
,0.9988,0.9896,0.9993,0.9956,0.9972,0.9949,0.9767,0.9821,0.9958,0.9938,0.9278,0.9949,0.9842,0.982,0.9775,0.9324,0.93
78,0.9979,0.9872,0.9626,0.9893,0.9872,0.9604,0.9647,0.9037,0.9591,0.9972,0.9913,0.9969,0.9918,0.9758,0.9902,0.9849,0.
9219,0.993,0.9991,0.9993,0.9941,0.9996,0.9962,0.9976,0.9969,0.9489,0.9698,0.9991,0.9991,0.9899,0.9992,0.9945,0.9966
,0.9942,0.9301,0.9375,0.9993,0.9993,0.9924,0.9996,0.9966,0.9967,0.9962,0.9205,0.9433,0.9929,0.9918,0.9867,0.994,0.91
57,0.9831,0.9874,0.7037,0.9682,0.9893,0.9746,0.9261,0.9812,0.9408,0.9351,0.5923,0.3904,0.8002,0.989,0.8721,0.9432,0.
961,0.8525,0.9101,0.6959,0.5642,0.9789,0.9815,0.889,0.6359,0.8381,0.8999,0.5804,0.5831,0.4821,0.354,0.9916,0.9904,0.
```

8692,0.9899,0.9793,0.9699,0.9552,0.9541,0.9818,0.8377,0.4082,0.4252,0.4768,0.6923,0.2431,0.4776,0.3937,0.5956,0.936,  
0.8062,0.7246,0.8581,0.8316,0.5851,0.7217,0.6047,0.7568,0.9882,0.989,0.9564,0.9963,0.9865,0.9779,0.9787,0.9557,0.969  
9,0.5027,0.3327,0.2171,0.4526,0.3206,0.2551,0.2698,0.2467,0.2432,0.9929,0.9928,0.9812,0.9973,0.9866,0.9877,0.985,0.9  
635,0.984,0.6077,0.2964,0.2563,0.3142,0.326,0.197,0.1655,0.137,0.4137,0.3106,0.323,0.2322,0.2372,0.1452,0.2476,0.159  
1,0.1754,0.218,0.6553,0.3587,0.2862,0.2831,0.5451,0.1727,0.3226,0.3061,0.3803,0.5016,0.261,0.2527,0.2148,0.4221,0.16  
44,0.3195,0.2095,0.2958,0.709,0.7779,0.582,0.773,0.6169,0.7242,0.6444,0.4911,0.5946,0.8857,0.6773,0.425,0.5184,0.746  
4,0.3263,0.4484,0.4172,0.4233,0.7141,0.6002,0.5264,0.3805,0.3081,0.4328,0.262,0.2373,0.3755,0.6936,0.7146,0.6249,0.7  
371,0.5163,0.6164,0.602,0.1282,0.1235,0.896,0.9361,0.8234,0.936,0.7725,0.8746,0.8493,0.3717,0.542)  
> x13 <-  
c(0.9218,0.7515,0.631,0.6789,0.7507,0.5454,0.5071,0.4026,0.6756,0.8817,0.8238,0.8004,0.7397,0.5611,0.7185,0.6397,0.3  
09,0.7134,0.9306,0.9576,0.8547,0.9578,0.8552,0.9175,0.8943,0.4958,0.6637,0.9168,0.7694,0.5505,0.7169,0.7465,0.546,0.  
5929,0.4803,0.6178,0.8525,0.5569,0.3578,0.4085,0.6512,0.2688,0.437,0.383,0.4727,0.7514,0.4124,0.3225,0.2589,0.5454,0.  
.1736,0.5197,0.4025,0.4252,0.8585,0.8212,0.7415,0.7361,0.4975,0.701,0.6052,0.4571,0.7216,0.9482,0.8289,0.5767,0.7291  
,0.8617,0.5495,0.7926,0.67,0.4635,0.8842,0.897,0.7338,0.889,0.7882,0.8493,0.8145,0.4241,0.4703,0.8173,0.8522,0.7109,  
0.8474,0.5859,0.761,0.7901,0.2116,0.2761,0.8547,0.6219,0.4355,0.5739,0.6174,0.4377,0.2206,0.169,0.4928,0.8957,0.9307  
,0.8146,0.9386,0.7712,0.8788,0.8841,0.3338,0.5143,0.8495,0.6166,0.4185,0.6213,0.5844,0.4496,0.2312,0.2207,0.4225,0.8  
01,0.503,0.3574,0.4472,0.5192,0.3418,0.2163,0.1762,0.4219,0.9227,0.9502,0.8174,0.9456,0.8255,0.9076,0.884,0.4982,0.7  
242,0.8625,0.5987,0.3915,0.5664,0.6751,0.3652,0.3603,0.278,0.5124,0.7496,0.4203,0.3031,0.3119,0.5539,0.1924,0.2814,0.  
.2069,0.3732,0.4377,0.3858,0.3033,0.2644,0.1894,0.2895,0.1862,0.1728,0.2928,0.3904,0.4136,0.3506,0.4042,0.3341,0.351  
3,0.3022,0.172,0.2405,0.7703,0.7915,0.5713,0.7385,0.5994,0.6519,0.5651,0.243,0.3744,0.6335,0.3926,0.2147,0.2247,0.35  
45,0.158,0.2702,0.2293,0.2516,0.7998,0.5125,0.3855,0.4221,0.5839,0.2774,0.2337,0.1597,0.4962,0.6788,0.7624,0.7518,0.  
4863,0.6623,0.6191,0.2293,0.249,0.6826,0.673,0.452,0.5099,0.2496,0.476,0.3856,0.1545,0.3944,0.7498,0.4841,0.3603,0.4  
841,0.4858,0.331,0.221,0.1668,0.414,0.7761,0.5886,0.4295,0.5789,0.477,0.454,0.2109,0.1715,0.4321,0.8249,0.8523,0.735  
7,0.8627,0.6481,0.7902,0.8134,0.2433,0.333,0.9474,0.9664,0.8529,0.9561,0.8525,0.9355,0.906,0.5468,0.7199,0.8392,0.89  
35,0.6197,0.8718,0.7083,0.7876,0.7567,0.4117,0.5672,0.9435,0.7393,0.5463,0.6717,0.8278,0.5421,0.5686,0.4231,0.6595,0.  
.5433,0.6559,0.4709,0.6305,0.3966,0.6181,0.5525,0.3851,0.5206,0.6105,0.3534,0.1727,0.2497,0.401,0.1361,0.2397,0.2338  
,0.3072,0.5825,0.2716,0.1968,0.2167,0.4164,0.1316,0.2462,0.1615,0.3365,0.9121,0.8289,0.8433,0.6797)  
> x14 <-  
c(0.605,0.7367,0.6074,0.471,0.7888,0.9529,0.9682,0.8729,0.9671,0.8777,0.9369,0.9205,0.5052,0.6775,0.9258,0.9473,0.79  
1,0.9342,0.7866,0.8946,0.8486,0.298,0.4719,0.9115,0.944,0.7882,0.9416,0.8124,0.8765,0.8478,0.2866,0.4923,0.8096,0.82  
7,0.7248,0.7773,0.3288,0.7332,0.7033,0.2729,0.6541,0.7795,0.5765,0.379,0.5968,0.482,0.4258,0.1717,0.1235,0.3557,0.69  
96,0.6556,0.6388,0.5742,0.2677,0.5676,0.5173,0.178,0.4612,0.6592,0.6991,0.5111,0.6796,0.4939,0.5702,0.5262,0.1322,0.  
2063,0.5956,0.2446,0.1783,0.1767,0.3824,0.1115,0.2116,0.1681,0.2886,0.718,0.7382,0.5095,0.6824,0.5838,0.605,0.5168,0.  
.2508,0.3851,0.7244,0.4383,0.2632,0.3117,0.5275,0.1878,0.3823,0.3171,0.3125,0.2605,0.4097,0.2718,0.5295,0.1736,0.388  
4,0.4014,0.651,0.1163,0.4092,0.1892,0.1451,0.183,0.3073,0.1064,0.1444,0.1356,0.2639,0.4327,0.235,0.1727,0.2032,0.287  
3,0.1376,0.1745,0.1692,0.2551,0.309,0.1958,0.1254,0.175,0.1942,0.1177,0.1221,0.1253,0.1772,0.2045,0.1322,0.847,0.123  
7,0.1348,0.781,0.775,0.88,0.1346,0.2178,0.1538,0.963,0.1377,0.1428,0.872,0.897,0.98,0.1512,0.2393,0.1646,0.1161,0.16  
01,0.1581,0.105,0.911,0.1015,0.1615,0.2249,0.15,0.1007,0.1372,0.1473,0.925,0.913,0.962,0.1522,0.5788,0.3061,0.2472,0.  
.273,0.4272,0.1729,0.3134,0.2516,0.3343,0.965,0.9522,0.9532,0.9688,0.9539,0.9298,0.9054,0.8074,0.7711,0.9641,0.8532,  
0.6005,0.8367,0.8758,0.6344,0.6192,0.4129,0.3685,0.991,0.9835,0.9631,0.9738,0.9053,0.9555,0.9451,0.6033,0.7728,0.998  
2,0.9832,0.978,0.9924,0.9807,0.9692,0.8562,0.6629,0.9465,0.9827,0.9675,0.9577,0.9777,0.936,0.9586,0.7631,0.475,0.833  
5,0.9962,0.9976,0.9833,0.999,0.9775,0.9913,0.995,0.8692,0.9504,0.9985,0.996,0.9967,0.9958,0.9822,0.9921,0.9926,0.899  
1,0.9838,0.9985,0.9982,0.9913,0.9989,0.9936,0.9955,0.9949,0.9449,0.9497,0.9992,0.9975,0.9979,0.9969,0.9905,0.9962,0.  
9951,0.9759,0.9943,0.7925,0.3784,0.2871,0.2864,0.5382,0.1757,0.3795,0.2206,0.4289,0.6818,0.6457,0.2341,0.602,0.4948,  
0.563,0.4708,0.4283,0.5167,0.9962,0.9925,0.9831,0.9826,0.9577,0.977,0.9632,0.9334,0.9572,0.9871,0.9506,0.8905,0.9567  
,0.9007,0.9134,0.4121,0.2607,0.8193,0.9987,0.9991,0.993,0.9995,0.9929,0.9972,0.9979)  
> x15 <-  
c(0.9298,0.9589,0.9941,0.976,0.9343,0.9869,0.9514,0.9641,0.693,0.5281,0.8696,0.9766,0.9167,0.7991,0.9464,0.7535,0.90  
63,0.2884,0.2165,0.7783,0.978,0.9491,0.8437,0.9569,0.8521,0.9037,0.297,0.2143,0.7137,0.9939,0.97,0.9277,0.9796,0.945  
9,0.9588,0.7066,0.4266,0.8702,0.9954,0.9647,0.9453,0.961,0.9632,0.9147,0.724,0.4841,0.9184,0.9989,0.9976,0.9894,0.99  
78,0.996,0.9918,0.9923,0.9919,0.9937,0.9985,0.9974,0.9923,0.9923,0.9818,0.9903,0.9863,0.9873,0.947,0.992,0.9364,0.80  
41,0.8261,0.9064,0.6913,0.8002,0.5824,0.6916,0.9952,0.988,0.9869,0.9835,0.9506,0.9728,0.9708,0.6454,0.9454,0.9911,0.  
9929,0.9739,0.996,0.9514,0.9802,0.989,0.3703,0.3177,0.9991,0.9993,0.9956,0.9996,0.9948,0.9978,0.9984,0.8695,0.8735,0.  
9916,0.9528,0.8207,0.963,0.8876,0.8907,0.5699,0.4768,0.718,0.9983,0.9986,0.9943,0.999,0.999,0.9971,0.9972,0.9587,0.  
.9582,0.9993,0.9995,0.9937,0.9996,0.9966,0.9986,0.9978,0.9856,0.9914,0.9989,0.9901,0.9813,0.9898,0.9896,0.9814,0.983  
5,0.9272,0.9827,0.5573,0.2856,0.2443,0.1784,0.37,0.1426,0.3153,0.3356,0.2688,0.9992,0.9972,0.999,0.9965,0.9905,0.997  
,0.9951,0.9705,0.9979,0.9997,0.9998,0.9974,0.9998,0.9982,0.9993,0.999,0.9854,0.9936,0.9996,0.9996,0.9995,0.99  
66,0.9983,0.9972,0.9745,0.9752,0.9996,0.9997,0.9962,0.9998,0.9978,0.9985,0.9983,0.9647,0.978,0.9984,0.9984,0.9965,0.  
9982,0.9667,0.996,0.9964,0.8665,0.9871,0.9991,0.999,0.994,0.9993,0.9929,0.9966,0.997,0.8787,0.8767,0.9893,0.9152,0.6  
891,0.6743,0.932,0.4742,0.7886,0.6718,0.5985,0.9948,0.9927,0.8811,0.9827,0.9682,0.9617,0.9409,0.8335,0.8934,0.9072,0.  
.756,0.7762,0.6443,0.6478,0.5781,0.5197,0.5525,0.7184,0.966,0.8708,0.8346,0.8684,0.8748,0.7012,0.811,0.6927,0.8258,0.  
.9936,0.995,0.9788,0.9978,0.9895,0.9891,0.9864,0.9805,0.9913,0.4919,0.5062,0.5003,0.7446,0.379,0.4885,0.5913,0.1665,  
0.2336,0.2933,0.2085,0.2271,0.1735,0.1647,0.1495,0.1533,0.1243,0.2098,0.3086,0.2204,0.2079,0.2004,0.2155,0.1441,0.14  
62,0.122,0.2223,0.2757,0.1705,0.2049,0.1785,0.2234,0.1311,0.1322,0.1015,0.2427,0.9896,0.9505,0.959,0.9017,0.9763,0.8  
155,0.9642,0.858,0.8637,0.9965,0.9957,0.9879,0.9962,0.9934,0.9916,0.9887,0.9907,0.9884,0.9992)  
> x16 <-  
c(0.9896,0.9947,0.9484,0.9964,0.832,0.9945,0.9537,0.9918,0.9991,0.9988,0.9978,0.9991,0.9983,0.9975,0.9958,0.9955,0.9  
898,0.9996,0.9965,0.9985,0.9963,0.9981,0.9899,0.9953,0.9724,0.9979,0.9991,0.9992,0.9973,0.9996,0.9961,0.9977,0.9983,  
0.9758,0.9666,0.9996,0.9995,0.9995,0.999,0.9971,0.999,0.9975,0.9877,0.9966,0.9991,0.9992,0.9944,0.9993,0.9953,0.9966  
,0.996,0.9557,0.9688,0.9996,0.9997,0.9979,0.9997,0.9994,0.9993,0.9985,0.9973,0.9985,0.9971,0.9869,0.9596,0.985,0.980  
5,0.9667,0.9647,0.8436,0.8357,0.9992,0.9951,0.9876,0.9931,0.9963,0.9811,0.9898,0.956,0.9092,0.6206,0.3557,0.2425,0.1  
715,0.3789,0.103,0.3661,0.2162,0.4258,0.9919,0.9728,0.9681,0.9255,0.9566,0.9432,0.8905,0.9145,0.9133,0.9992,0.9987,0.  
.9962,0.9992,0.9978,0.9984,0.9981,0.997,0.994,0.9997,0.9997,0.9983,0.9998,0.9994,0.9994,0.9986,0.999,0.9996,0.9994,0.  
9965,0.9963,0.9932,0.9964,0.9889,0.9981,0.9921,0.992,0.9986,0.9982,0.979,0.9973,0.9971,0.9956,0.9909,0.99,0.9893,0.  
9894,0.9897,0.776,0.9881,0.9346,0.9637,0.9526,0.9043,0.978,0.9998,0.9987,0.9957,0.9961,0.9989,0.9881,0.9977,0.9913,0.  
.9933,0.9982,0.9989,0.9957,0.999,0.9955,0.9981,0.9963,0.9953,0.9944,0.9995,0.9996,0.9996,0.9983,0.999,0.998,0.9964,0

.9984,0.9994,0.9994,0.9973,0.9997,0.9964,0.9981,0.9987,0.9464,0.9516,0.9997,0.9998,0.9968,0.9998,0.9984,0.9989,0.9992,0.9934,0.9968,0.9999,0.9994,0.9972,0.9988,0.9987,0.993,0.9957,0.983,0.9958,0.9987,0.9936,0.9932,0.9965,0.9807,0.9951,0.8509,0.382,0.9905,0.9992,0.999,0.9942,0.9983,0.9824,0.9954,0.9954,0.8769,0.9196,0.9997,0.9998,0.9913,0.9992,0.9973,0.9976,0.996,0.9789,0.976,0.9927,0.9671,0.7019,0.892,0.9365,0.7319,0.7672,0.7886,0.4864,0.9934,0.9665,0.9003,0.9249,0.9377,0.875,0.705,0.3592,0.6196,0.9983,0.9992,0.9933,0.9994,0.9899,0.9971,0.9968,0.9548,0.9117,0.9961,0.9836,0.9366,0.982,0.9561,0.9624,0.4196,0.1842,0.7695,0.9998,0.9997,0.9981,0.9999,0.9986,0.9991,0.9995,0.9928,0.993,0.9997,0.9998,0.9986,0.9998,0.9984,0.9992,0.9992,0.9813,0.9738,0.9998,0.9986,0.9973,0.9974,0.9984,0.9932,0.9964,0.9761,0.9919,0.9995,0.9964,0.9952,0.9906,0.9927,0.9763,0.9932,0.9727,0.9933,0.9852,0.9742,0.956,0.9506,0.8899)  
> x17 <-  
c(0.9585,0.9274,0.8801,0.8923,0.964,0.7739,0.8502,0.566,0.7827,0.5611,0.4756,0.6579,0.8118,0.7431,0.2889,0.3284,0.1362,0.4871,0.1203,0.4475,0.2676,0.461,0.9998,0.9989,0.9992,0.9978,0.9984,0.9933,0.9984,0.9963,0.9983,0.9992,0.9992,0.9977,0.9996,0.9973,0.9984,0.9979,0.9774,0.9808,0.9992,0.9995,0.9952,0.9995,0.9951,0.999,0.9986,0.9952,0.9975,0.9997,0.9984,0.9977,0.9982,0.9971,0.9939,0.9779,0.929,0.9967,0.9989,0.9962,0.984,0.9976,0.9907,0.931,0.6446,0.9573,0.9999,0.9994,0.9995,0.9994,0.9986,0.998,0.9984,0.9887,0.999,0.9976,0.9903,0.9924,0.9967,0.9689,0.9915,0.8285,0.4147,0.9914,0.9994,0.9993,0.9977,0.9995,0.9989,0.999,0.9984,0.9993,0.9992,0.9996,0.9995,0.9916,0.9991,0.9978,0.9966,0.9952,0.9874,0.9925,0.9885,0.988,0.9018,0.9863,0.9593,0.9373,0.9514,0.8686,0.924,0.9484,0.7482,0.5317,0.7082,0.6734,0.5015,0.427,0.3618,0.5642,0.9941,0.9969,0.9836,0.9983,0.9861,0.9906,0.9891,0.9787,0.9923,0.5378,0.5839,0.4827,0.7105,0.4606,0.5449,0.561,0.3585,0.4617,0.9785,0.9807,0.9604,0.9812,0.9736,0.9685,0.9501,0.9459,0.9381,0.9671,0.9111,0.7596,0.7706,0.8616,0.7124,0.5904,0.704,0.456,0.9957,0.9858,0.9837,0.9761,0.9841,0.9801,0.9552,0.9636,0.8925,0.5033,0.2847,0.1888,0.1935,0.2819,0.1655,0.1762,0.118,0.2639,0.8814,0.8698,0.8457,0.9405,0.8708,0.8626,0.8765,0.8679,0.8744,0.2997,0.3844,0.3232,0.612,0.2358,0.3675,0.46,0.2021,0.2501,0.9634,0.9434,0.9703,0.9663,0.8736,0.9483,0.9343,0.9404,0.9014,0.9927,0.9888,0.99,0.99,0.9856,0.9639,0.9853,0.9741,0.9734,0.9668,0.2371,0.126,0.1425,0.1536,0.1701,0.93,0.93,0.87,0.2145,0.16,0.1058,0.1069,0.1253,0.1147,0.735,0.809,0.867,0.1404,0.9926,0.9452,0.9838,0.9464,0.9722,0.9075,0.9881,0.904,0.9614,0.999,0.9976,0.9992,0.999,0.9974,0.9981,0.9961,0.9891,0.9954,0.9996,0.9914,0.9918,0.9929,0.992,0.9853,0.9896,0.9599,0.9889,0.999,0.9982,0.9709,0.9985,0.9946,0.9929,0.9953,0.9897,0.9945,0.9969,0.9795,0.9437,0.9826,0.9486,0.9462,0.9186,0.7667,0.9615,0.9908,0.9884,0.9543,0.9933,0.9413,0.9629,0.9757,0.4454,0.3182,0.9968,0.9871,0.9888,0.9948,0.9598,0.9854,0.8662,0.5487,0.9935,0.9974,0.9871,0.9791,0.9908,0.9692,0.9822,0.8601,0.7598,0.9442)  
> x18 <-  
c(0.9989,0.9949,0.9938,0.9967,0.9742,0.9916,0.9862,0.9611,0.9933,0.9971,0.9968,0.9795,0.9988,0.9822,0.9912,0.9957,0.9634,0.9772,0.9994,0.9993,0.9963,0.9996,0.9969,0.9987,0.9987,0.9972,0.998,0.9995,0.9946,0.9946,0.9914,0.9951,0.9846,0.9928,0.9816,0.9901,0.9984,0.9914,0.9877,0.9882,0.9919,0.9727,0.9889,0.9691,0.9825,0.9994,0.9966,0.9987,0.9962,0.9975,0.9933,0.9979,0.981,0.9972,0.9841,0.9447,0.9318,0.9206,0.8633,0.8933,0.7906,0.7057,0.8943,0.9962,0.9898,0.9918,0.9932,0.9601,0.9836,0.986,0.7844,0.9728,0.9978,0.989,0.9841,0.9936,0.9834,0.9842,0.7815,0.4728,0.9492,0.9996,0.9995,0.9968,0.9997,0.9974,0.9984,0.9989,0.9757,0.9653,0.998,0.9915,0.9715,0.9938,0.9797,0.9807,0.716,0.4443,0.8443,0.999,0.9904,0.9836,0.9803,0.9909,0.964,0.9375,0.8654,0.9303,0.9746,0.8097,0.6496,0.5979,0.8424,0.473,0.6958,0.434,0.5914,0.9999,0.9992,0.9981,0.9987,0.9986,0.9964,0.9981,0.9905,0.9968,0.9961,0.9649,0.9346,0.9067,0.9426,0.8491,0.9371,0.7952,0.9302,0.9894,0.9823,0.901,0.963,0.8404,0.9142,0.9319,0.6261,0.5334,0.9991,0.9952,0.9907,0.9958,0.9852,0.9926,0.9846,0.9549,0.9891,0.9993,0.9995,0.9948,0.9998,0.9958,0.9975,0.9986,0.9041,0.9691,0.9994,0.9996,0.9969,0.9998,0.9957,0.9985,0.9989,0.9074,0.8563,0.9982,0.9976,0.9869,0.9989,0.9989,0.9899,0.9943,0.7869,0.7768,0.9998,0.9996,0.9977,0.9997,0.9986,0.9983,0.9982,0.9928,0.9913,0.9998,0.9997,0.999,0.9998,0.9994,0.9996,0.9992,0.9991,0.9991,0.9998,0.9979,0.9949,0.9967,0.9953,0.9851,0.9904,0.9752,0.9924,0.9963,0.9959,0.9755,0.9971,0.9763,0.9828,0.9884,0.6754,0.5389,0.9996,0.9978,0.9913,0.9974,0.9944,0.9924,0.9685,0.9093,0.9542,0.9982,0.9907,0.9742,0.994,0.9766,0.9817,0.7211,0.5263,0.9101,0.9979,0.9946,0.9985,0.9958,0.9826,0.9955,0.9936,0.9562,0.9959,0.9972,0.9923,0.9945,0.9917,0.9552,0.9886,0.9903,0.95,0.9793,0.9991,0.9967,0.9992,0.9986,0.9883,0.9969,0.9974,0.9556,0.9982,0.9992,0.9994,0.9952,0.9996,0.9963,0.9985,0.9983,0.9954,0.9976,0.9973,0.9983,0.979,0.9984,0.9889,0.9942,0.9952,0.9854,0.9891,0.999,0.9987,0.9882,0.9994,0.9876,0.9965,0.9982,0.9903,0.9807,0.9997,0.9958,0.9935,0.9973,0.9947,0.9919,0.9918,0.9444,0.9981,0.9995,0.997,0.9961)  
> x19 <-  
c(0.9963,0.9936,0.9907,0.9942,0.9572,0.9957,0.9989,0.995,0.9937,0.9949,0.9892,0.9896,0.993,0.9768,0.9951,0.9972,0.9983,0.9841,0.9994,0.9792,0.9937,0.997,0.9481,0.9813,0.9948,0.9853,0.9894,0.9923,0.9379,0.9773,0.984,0.5914,0.9419,0.9998,0.9993,0.9997,0.9994,0.998,0.9992,0.9987,0.9935,0.9979,0.9998,0.9991,0.9995,0.9992,0.9995,0.9985,0.9987,0.9981,0.9972,0.9979,0.9996,0.9994,0.9972,0.9995,0.9989,0.9983,0.9974,0.9978,0.9979,0.9997,0.9996,0.9986,0.9997,0.9988,0.9992,0.9998,0.9992,0.9992,0.9997,0.9997,0.9985,0.9998,0.999,0.9996,0.9992,0.9983,0.9988,0.9994,0.9967,0.9954,0.9977,0.9942,0.9941,0.9614,0.8117,0.9856,0.9988,0.9984,0.9935,0.9992,0.9916,0.995,0.998,0.8306,0.7876,0.9974,0.9971,0.9863,0.9987,0.9759,0.99,0.9961,0.4418,0.359,0.9977,0.9918,0.9921,0.9932,0.9699,0.9828,0.9858,0.7984,0.9635,0.999,0.9945,0.9926,0.9931,0.9908,0.9858,0.9802,0.8973,0.9899,0.9991,0.9992,0.9403,0.9989,0.9927,0.9967,0.9931,0.9955,0.9982,0.9955,0.9973,0.9083,0.9956,0.9812,0.9856,0.9817,0.976,0.9926,0.9999,0.9992,0.9991,0.9988,0.9997,0.9951,0.9992,0.9954,0.9982,0.999,0.9996,0.9995,0.9992,0.9997,0.9982,0.9997,0.9985,0.9958,0.9999,0.9994,0.9999,0.9994,0.9998,0.9995,0.9998,0.9995,0.9998,0.9999,0.9995,0.9977,0.9988,0.9972,0.9982,0.996,0.9914,0.9973,0.9897,0.9142,0.8617,0.8145,0.8351,0.7297,0.768,0.7036,0.6764,0.7858,0.9678,0.9271,0.8934,0.8802,0.9349,0.7774,0.9714,0.91,0.7598,0.9737,0.9148,0.9199,0.9001,0.9141,0.8384,0.8089,0.8501,0.8555,0.991,0.9802,0.9847,0.9799,0.9628,0.9738,0.9661,0.9781,0.9222,0.8879,0.6091,0.3045,0.2438,0.6426,0.1423,0.2879,0.2197,0.2784,0.9714,0.8344,0.7191,0.7422,0.8823,0.6056,0.728,0.3692,0.6563,0.999,0.9986,0.9914,0.999,0.995,0.9952,0.9953,0.958,0.8784,0.7571,0.3321,0.1351,0.1651,0.3951,0.775,0.1947,0.1618,0.2743,0.9971,0.9937,0.9603,0.9919,0.9887,0.9691,0.9622,0.9245,0.875,0.7231,0.642,0.6095,0.5288,0.279,0.4783,0.4543,0.312,0.611,0.978,0.8805,0.653,0.7578,0.8281,0.5332,0.4521,0.2849,0.2375,0.9986,0.9988,0.9944,0.9996,0.9895,0.997,0.9985,0.9025,0.8256,0.9996,0.9994,0.9961,0.9997,0.9969,0.998,0.9984,0.9768,0.9782,0.9997,0.9983,0.9985,0.9976,0.9967,0.9961)  
> x110 <-  
c(0.9983,0.991,0.9967,0.9996,0.9993,0.9966,0.9996,0.9974,0.998,0.999,0.9969,0.9978,0.9993,0.9953,0.9977,0.9952,0.9892,0.9903,0.9895,0.9886,0.9875,0.9856,0.862,0.6869,0.7425,0.9056,0.9046,0.7929,0.6564,0.9903,0.9845,0.774,0.9807,0.96,0.9577,0.9534,0.9603,0.9749,0.9993,0.9986,0.988,0.9984,0.996,0.9962,0.9942,0.9927,0.9931,0.9934,0.994,0.9622,0.9949,0.9853,0.9875,0.9813,0.9788,0.9807,0.9992,0.9914,0.9899,0.9877,0.9956,0.9771,0.9879,0.9203,0.9788,0.8585,0.5573,0.5543,0.4584,0.5264,0.4717,0.345,0.5449,0.5849,0.6827,0.595,0.3298,0.4887,0.5545,0.454,0.2943,0.3908,0.4214,0.9995,0.9995,0.9954,0.9995,0.9985,0.9993,0.9989,0.9991,0.9992,0.8201,0.5981,0.5022,0.5235,0.451,0.4212,0.355,0.2321,0.5042,0.9954,0.9655,0.9525,0.9701,0.939,0.9514,0.8946,0.7007,0.9564,0.9988,0.9925,0.9718,0.9908,0.9912,0.9823,0.979,0.9505,0.862,0.9999,0.9998,0.9976,0.9999,0.9996,0.9996,0.9994,0.9986,0.9983,0.6643,0.2964,0.1891,0.2205,0.3812,0.1247,0.2572,0.142,0.3154,0.9999,0.9997,0.9976,0.9998,0.9996,0.9994,0.9991,0.9987,0.9981,0.9999,0.9998,0.9984,0.9999,0.9998,0.9997,0.9994,0.9989,0.9984,0.7991,0.7358,0.4434,0.8199,0.5928,0.6683,0.617,0.3538,0.4189,0.9999,0.9998,0.9963,0.9999,0.

```
9996,0.9994,0.9991,0.9979,0.9985,0.9995,0.9992,0.993,0.9994,0.997,0.9981,0.9974,0.9916,0.9862,0.7292,0.3856,0.3978,0.2705,0.3569,0.265,0.173,0.3001,0.4604,0.9999,0.9998,0.9969,0.9999,0.9993,0.9996,0.9993,0.9976,0.998,0.9983,0.9954,0.9728,0.9953,0.9901,0.9871,0.9881,0.9464,0.8846,0.8474,0.8627,0.622,0.9042,0.7696,0.8144,0.8242,0.6168,0.8017,0.9967,0.9953,0.9765,0.9952,0.9861,0.9905,0.9872,0.9803,0.9535,0.875,0.5565,0.3253,0.3421,0.6114,0.2532,0.5892,0.3848,0.3437,0.4976,0.2411,0.2851,0.234,0.2601,0.1842,0.1672,0.2485,0.341,0.9914,0.9858,0.9147,0.9868,0.9701,0.9697,0.9581,0.9376,0.9556,0.8827,0.5592,0.345,0.539,0.6613,0.3784,0.5245,0.4755,0.4457,0.7263,0.4147,0.4389,0.4048,0.514,0.3123,0.3554,0.2603,0.5069,0.9973,0.9914,0.9837,0.9926,0.991,0.9803,0.9785,0.9373,0.8908,0.9997,0.9996,0.9981,0.9997,0.9985,0.9986,0.9987,0.9945,0.9896,0.9999,0.9988,0.9983,0.9982,0.9992,0.9932,0.9925,0.9616,0.9959,0.9998)
> x111 <-
c(0.9983,0.9988,0.9987,0.9983,0.9967,0.9769,0.9143,0.997,0.9999,0.9994,0.999,0.9992,0.999,0.9984,0.9974,0.9891,0.9942,0.9997,0.9989,0.9991,0.9984,0.998,0.9986,0.996,0.9869,0.9892,0.999,0.992,0.9611,0.966,0.9899,0.914,0.9766,0.9458,0.9233,0.9991,0.9928,0.963,0.9787,0.9923,0.9397,0.962,0.9313,0.8618,0.996,0.9852,0.9747,0.9791,0.9623,0.9714,0.9559,0.8733,0.8714,0.9887,0.8917,0.8625,0.6683,0.9077,0.5597,0.9031,0.7311,0.9145,0.9996,0.9975,0.9979,0.9965,0.9971,0.9925,0.9967,0.9733,0.9955,0.9996,0.9994,0.9928,0.9996,0.9947,0.9974,0.9979,0.9081,0.8568,0.9995,0.9994,0.9942,0.9996,0.9959,0.9964,0.998,0.8887,0.9044,0.9998,0.9987,0.9966,0.9986,0.9979,0.9946,0.9951,0.9783,0.9941,0.9961,0.9895,0.9505,0.9865,0.977,0.9622,0.9617,0.8277,0.8105,0.9987,0.9955,0.9981,0.9952,0.9871,0.996,0.9926,0.9832,0.9826,0.9977,0.9887,0.9638,0.9913,0.9681,0.9809,0.8833,0.8387,0.9157,0.9959,0.9421,0.9473,0.9737,0.9277,0.9528,0.9259,0.8887,0.9311,0.995,0.9977,0.9935,0.9981,0.9939,0.9942,0.9177,0.7195,0.9831,0.9995,0.9994,0.9937,0.9996,0.9977,0.9982,0.9984,0.996,0.9959,0.9978,0.9933,0.9974,0.9955,0.9727,0.9927,0.9917,0.9046,0.9933,0.9997,0.9977,0.9988,0.9967,0.997,0.9932,0.9956,0.9664,0.9984,0.9994,0.9943,0.9937,0.9943,0.9925,0.9894,0.9856,0.9173,0.9876,0.9946,0.9716,0.9616,0.9737,0.9265,0.9359,0.8994,0.8,0.9357,0.9995,0.9993,0.9954,0.9996,0.9975,0.998,0.9982,0.996,0.9975,0.9998,0.9997,0.9967,0.9998,0.9982,0.999,0.9993,0.9871,0.9781,0.9996,0.9977,0.9935,0.9982,0.9892,0.9931,0.9883,0.9689,0.9917,0.9952,0.9732,0.9665,0.9878,0.9256,0.9774,0.5752,0.3143,0.9575,0.9977,0.9904,0.9848,0.9949,0.9835,0.9875,0.786,0.4938,0.9162,0.9979,0.9873,0.9818,0.9928,0.9813,0.9848,0.6689,0.3711,0.9484,0.987,0.982,0.966,0.9838,0.5431,0.9577,0.9776,0.7325,0.928,0.9985,0.9978,0.9948,0.9974,0.9811,0.9955,0.9935,0.904,0.9641,0.9995,0.9994,0.9953,0.9997,0.9967,0.9983,0.9983,0.9933,0.9971,0.9961,0.9934,0.9653,0.9957,0.9735,0.9773,0.985,0.8618,0.8372,0.8783,0.7507,0.7216,0.6149,0.5767,0.6498,0.5437,0.5294,0.5719,0.9991,0.9968,0.997,0.9959,0.9863,0.9897,0.9915,0.9509,0.9848,0.9989,0.9936,0.9751,0.9932)
> x112 <-
c(0.985,0.9806,0.806,0.5958,0.8146,0.9963,0.9933,0.977,0.9963,0.9766,0.9771,0.9901,0.5996,0.4595,0.9996,0.9975,0.9957,0.9971,0.9933,0.9946,0.9922,0.9723,0.991,0.9902,0.9674,0.9131,0.9704,0.926,0.9394,0.3413,0.147,0.6875,0.9942,0.9477,0.8867,0.9138,0.9549,0.8284,0.7491,0.5248,0.6904,0.975,0.877,0.6318,0.6895,0.817,0.4962,0.5205,0.2943,0.4297,0.9995,0.997,0.9975,0.9947,0.9966,0.9922,0.9981,0.9924,0.989,0.9987,0.9882,0.9949,0.9863,0.9931,0.9672,0.9944,0.9765,0.9877,0.9025,0.8749,0.9091,0.8858,0.7055,0.8599,0.8299,0.8014,0.7698,0.989,0.9864,0.9818,0.9707,0.9302,0.9812,0.9619,0.9607,0.9376,0.2199,0.1364,0.936,0.1252,0.1532,0.904,0.977,0.1104,0.1284,0.3577,0.1981,0.1617,0.1748,0.2384,0.1261,0.1811,0.1579,0.2261,0.4767,0.1716,0.1768,0.102,0.2907,0.939,0.1912,0.152,0.2727,0.9938,0.9563,0.9732,0.9324,0.9801,0.9012,0.9852,0.9311,0.9662,0.9987,0.9964,0.9979,0.9961,0.9932,0.9958,0.9913,0.9809,0.9917,0.9985,0.9979,0.9975,0.992,0.9934,0.9935,0.9845,0.9916,0.5603,0.4186,0.2824,0.1799,0.1365,0.2162,0.1654,0.1113,0.2419,0.9986,0.9905,0.9684,0.9908,0.9748,0.9774,0.9423,0.8307,0.9727,0.9968,0.9973,0.9714,0.9971,0.9717,0.9909,0.9911,0.9095,0.9479,0.9664,0.9705,0.8796,0.9789,0.8098,0.9208,0.9483,0.1794,0.1494,0.994,0.9755,0.9796,0.9921,0.9194,0.9833,0.6761,0.321,0.9911,0.9853,0.9373,0.8744,0.9586,0.8599,0.9359,0.496,0.3994,0.7897,0.992,0.9558,0.9345,0.9736,0.8527,0.9483,0.8662,0.8058,0.925,0.9855,0.9855,0.9236,0.9928,0.9324,0.9667,0.9801,0.8288,0.8996,0.9987,0.9983,0.986,0.9983,0.9926,0.9953,0.9945,0.9871,0.9902,0.9987,0.9879,0.9848,0.9804,0.9875,0.9715,0.9732,0.9525,0.9672,0.9962,0.9807,0.9721,0.9761,0.9842,0.9571,0.9759,0.9481,0.9599,0.9986,0.9925,0.9948,0.9917,0.995,0.9842,0.9927,0.9484,0.9912,0.9807,0.9631,0.9677,0.9665,0.7907,0.9435,0.9405,0.511,0.9101,0.9837,0.9381,0.8873,0.9588,0.9025,0.9207,0.4076,0.2367,0.791,0.9963,0.9963,0.982,0.9976,0.9742,0.9907,0.9929,0.764,0.7373,0.969,0.9545,0.8773,0.947,0.753,0.8609,0.9074,0.3299,0.6137,0.9653,0.8816,0.6575,0.9209,0.7891,0.8503,0.3399,0.2857,0.4547,0.9881,0.9213,0.8392,0.8837,0.9148,0.8208,0.5947,0.4575)
> x113 <-
c(0.6488,0.8152,0.4534,0.2758,0.2926,0.5424,0.2211,0.3451,0.2199,0.3149,0.9994,0.9964,0.9933,0.9956,0.9949,0.9908,0.9918,0.9685,0.9846,0.9978,0.9867,0.9752,0.988,0.9751,0.9812,0.96,0.9009,0.9619,0.9989,0.9991,0.9883,0.9994,0.9894,0.9956,0.9974,0.7452,0.8655,0.99,0.9639,0.8988,0.9552,0.9164,0.9188,0.5794,0.409,0.7073,0.9993,0.9988,0.9922,0.999,0.9936,0.9955,0.9961,0.9351,0.9194,0.9995,0.9994,0.9973,0.9994,0.9981,0.9989,0.9983,0.9966,0.9973,0.9985,0.9872,0.9685,0.9834,0.9794,0.9503,0.9343,0.8849,0.9617,0.9887,0.9899,0.9535,0.992,0.9371,0.9709,0.9779,0.4623,0.4137,0.9969,0.9853,0.9462,0.985,0.9642,0.9694,0.8066,0.6579,0.7968,0.9787,0.9607,0.9046,0.9487,0.7375,0.8768,0.9012,0.4057,0.71,0.9879,0.9751,0.9586,0.9733,0.8631,0.9424,0.9452,0.5276,0.7793,0.9837,0.9657,0.9797,0.9638,0.9515,0.9474,0.6323,0.9628,0.9731,0.8656,0.7805,0.8698,0.738,0.8399,0.6534,0.4996,0.7667,0.9894,0.9756,0.9878,0.9817,0.8539,0.9681,0.9738,0.6212,0.9868,0.9944,0.9953,0.9634,0.9968,0.9684,0.9894,0.9906,0.9325,0.9695,0.9975,0.9981,0.9794,0.9981,0.9866,0.9939,0.9944,0.9746,0.9842,0.9991,0.9989,0.9872,0.9994,0.9865,0.9973,0.9982,0.9895,0.9805,0.9996,0.9948,0.9886,0.9957,0.9886,0.9862,0.9785,0.9038,0.9971,0.9989,0.9913,0.9873,0.9908,0.983,0.9803,0.9787,0.8874,0.9874,0.9982,0.9892,0.9893,0.9897,0.9844,0.9827,0.9808,0.9242,0.9907,0.9779,0.9779,0.9484,0.9667,0.7237,0.9439,0.9497,0.6142,0.8115,0.9966,0.9977,0.9643,0.9985,0.9681,0.987,0.9918,0.7382,0.912,0.9911,0.9669,0.947,0.9654,0.9055,0.9481,0.8112,0.5765,0.8608,0.998,0.9954,0.9945,0.9928,0.9771,0.991,0.9877,0.9505,0.9763,0.9986,0.9965,0.9952,0.9922,0.9827,0.9914,0.9881,0.9833,0.9878,0.9971,0.9862,0.9961,0.9913,0.9942,0.9908,0.9829,0.9825,0.9979,0.998,0.9852,0.9967,0.9917,0.9953,0.9927,0.9886,0.9906,0.9994,0.9994,0.996,0.9995,0.9973,0.999,0.9981,0.9942,0.9963,0.9868,0.9792,0.9659,0.9742,0.8587,0.9495,0.9533,0.5366,0.8604,0.9973,0.9873,0.9569,0.9911,0.9747,0.9838,0.6725,0.5154,0.8396,0.9977,0.9824,0.9744,0.9852,0.9715,0.9713,0.9485,0.8069,0.9674,0.945,0.9469,0.7062,0.9125,0.7863,0.8669,0.833,0.6555,0.6849,0.9982,0.9981,0.9127,0.9973)
> x114 <-
c(0.9838,0.9933,0.9896,0.9893,0.9964,0.9968,0.9789,0.8057,0.9418,0.973,0.8483,0.9628,0.9604,0.5339,0.9997,0.9983,0.9976,0.997,0.9986,0.9932,0.9983,0.9916,0.9946,0.9968,0.9867,0.983,0.9765,0.9424,0.9767,0.9617,0.9442,0.97,0.9999,0.9994,0.9983,0.9986,0.9995,0.9967,0.9993,0.9912,0.9998,0.9998,0.9986,0.9998,0.9993,0.9997,0.9991,0.9993,0.9997,0.998,0.9937,0.994,0.9896,0.9902,0.9895,0.9759,0.9912,0.9644,0.9542,0.9693,0.9497,0.9819,0.938,0.9739,0.9626,0.9612,0.9517,0.9759,0.9353,0.8955,0.9159,0.9126,0.8823,0.813,0.8198,0.7817,0.9933,0.9849,0.9921,0.9887,0.971,0.9884,0.9832,0.9884,0.9544,0.8062,0.4891,0.3068,0.2965,0.4877,0.2439,0.2736,0.198,0.273,0.9327,0.8988,0.7551,0.9117,0.6626,0.7712,0.8508,0.2242,0.2304,0.497,0.4023,0.3764,0.3633,0.1585,0.3317,0.3012,0.1293,0.3599,0.9291,0.9093,0.7719,0.9066,0.7441,0.7934,0.822,0.2272,0.2169,0.6424,0.27,0.1621,0.1333,0.2967,0.926,0.1666,0.1633,0.2288,0.9096,0.7122,0.5037,0.5743,0.5937,0.4396,0.2563,0.1939,0.3164,0.8382,0.7617,0.4766,0.4101,0.3787,0.4396,0.335,0.2989,0.3021,0.9984,0.9876,0.9795,0.989,0.9809,0.9828,0.9535,0.8404,0.9727,0.9902,0.992,0.9673,0.9962,0.9365,0.9831,0.991,0.6422,0.6173,0.9819,0.9735,0.9
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115,0.9784,0.8861,0.9148,0.9525,0.6445,0.539,0.9987,0.992,0.9908,0.9908,0.9851,0.9857,0.9881,0.9525,0.9839,0.9986,0.9978,0.9895,0.9984,0.9893,0.995,0.9969,0.9818,0.9887,0.9945,0.9775,0.9816,0.9477,0.9194,0.9503,0.9197,0.9393,0.9447,0.7858,0.737,0.4427,0.663,0.5981,0.569,0.5249,0.4787,0.5259,0.9526,0.9475,0.5743,0.9478,0.8456,0.9029,0.858,0.8002,0.8758,0.1571,0.2181,0.1146,0.1909,0.1468,0.2006,0.1391,0.885,0.1092,0.9846,0.9603,0.903,0.9102,0.8748,0.911,0.8433,0.8883,0.6678,0.9558,0.9565,0.836,0.9562,0.9145,0.9327,0.9094,0.8567,0.8616,0.7821,0.4754,0.4021,0.2123,0.3717,0.3446,0.1785,0.4435,0.4472,0.9915,0.9603,0.8144,0.9484,0.9518,0.902,0.9423,0.8797,0.4295,0.9993,0.999,0.9923,0.9989,0.9976,0.9983,0.9974,0.998,0.9982,0.9985,0.9978,0.9879,0.9977,0.9934,0.9916,0.9934,0.9805,0.9822,0.431,0.1615,0.1138,0.1158,0.2217,0.943,0.1236,0.749,0.2199,0.9997,0.9995,0.9928,0.9996,0.999,0.9988,0.9985,0.9972)
> x115 <-
c(0.9977,0.3509,0.3098,0.1715,0.2761,0.2271,0.256,0.1975,0.1183,0.1199,0.9996,0.9992,0.993,0.9993,0.9988,0.9981,0.9972,0.994,0.9929,0.9998,0.9996,0.9974,0.9997,0.9995,0.9994,0.9988,0.9981,0.9981,0.9999,0.9997,0.9974,0.9997,0.9996,0.9994,0.9988,0.9986,0.9989,0.9985,0.9951,0.9988,0.9922,0.986,0.9888,0.9819,0.9638,0.8846,0.4915,0.3739,0.2844,0.229,0.1805,0.2781,0.1612,0.1876,0.2697,0.9996,0.9994,0.9913,0.9993,0.9978,0.9985,0.9974,0.994,0.995,0.9976,0.9929,0.9687,0.9914,0.9879,0.9819,0.9868,0.947,0.8763,0.9968,0.9966,0.9828,0.9959,0.9885,0.9951,0.9912,0.9919,0.9911,0.3729,0.1975,0.2564,0.1348,0.1779,0.1657,0.114,0.2115,0.3429,0.8841,0.8046,0.6026,0.7074,0.7324,0.6825,0.6344,0.6804,0.6146,0.3772,0.1967,0.1824,0.119,0.1433,0.1428,0.878,0.1651,0.2761,0.8986,0.882,0.7039,0.8822,0.775,0.8387,0.8137,0.6757,0.7469,0.4638,0.1807,0.1123,0.1553,0.2743,0.1194,0.1414,0.142,0.1944,0.3657,0.2088,0.1385,0.1688,0.2234,0.1274,0.1631,0.1385,0.1928,0.8208,0.8652,0.7443,0.8829,0.7196,0.8615,0.8201,0.5691,0.549,0.9235,0.7637,0.5509,0.6245,0.7908,0.4706,0.6408,0.5609,0.6423,0.8382,0.7858,0.7726,0.7093,0.4533,0.7077,0.634,0.5314,0.7139,0.9824,0.8465,0.7159,0.6751,0.9087,0.5683,0.6879,0.4999,0.6656,0.9989,0.9986,0.992,0.9988,0.994,0.9961,0.9961,0.9672,0.9681,0.9994,0.9954,0.9897,0.994,0.9963,0.9828,0.9576,0.8855,0.9731,0.9991,0.9934,0.9911,0.9951,0.9909,0.988,0.8891,0.8063,0.9767,0.9995,0.9974,0.993,0.997,0.9957,0.9946,0.9848,0.9516,0.9546,0.9989,0.9972,0.9942,0.9936,0.9857,0.9928,0.9874,0.9433,0.9439,0.9968,0.9941,0.9831,0.9893,0.9595,0.9816,0.9776,0.7885,0.8965,0.9929,0.9475,0.7648,0.8216,0.9282,0.6737,0.8283,0.7319,0.6584,0.9919,0.9517,0.7807,0.8875,0.9397,0.7797,0.7202,0.6408,0.5712,0.958,0.9077,0.8114,0.8188,0.7476,0.7965,0.7127,0.4947,0.5957,0.9419,0.7059,0.6208,0.427,0.6772,0.3636,0.6715,0.4405,0.7307,0.9972,0.9906,0.9954,0.9913,0.9629,0.9852,0.9835,0.8829,0.9831,0.9886,0.9466,0.9045,0.959,0.8822,0.9292,0.5701,0.3735,0.761,0.9892,0.9821,0.9632,0.9788,0.8477,0.9516,0.9638,0.4456,0.859,0.9915,0.9943,0.9698,0.9965,0.9495,0.9863,0.9894,0.5559,0.5633,0.9861,0.9897)
> x116 <-
c(0.9451,0.9927,0.9295,0.9643,0.9765,0.4374,0.5946,0.9982,0.9931,0.9697,0.9934,0.9807,0.9779,0.9612,0.9121,0.9661,0.9665,0.9749,0.8662,0.9826,0.8485,0.9387,0.9538,0.4475,0.6464,0.9558,0.9418,0.8004,0.941,0.8723,0.8485,0.8516,0.3288,0.4062,0.9954,0.9831,0.9905,0.9718,0.9606,0.9797,0.9536,0.9195,0.9441,0.9986,0.9926,0.9798,0.9933,0.9852,0.9823,0.8256,0.6759,0.9441,0.9991,0.9992,0.987,0.9994,0.9947,0.9974,0.9975,0.9908,0.995,0.9769,0.9513,0.9573,0.9545,0.7761,0.9198,0.9212,0.5372,0.933,0.9988,0.9881,0.9917,0.9981,0.9832,0.9788,0.9686,0.8363,0.9917,0.9949,0.9861,0.9839,0.9789,0.9394,0.9723,0.9705,0.8981,0.9532,0.9715,0.8547,0.7772,0.8168,0.7312,0.7161,0.6176,0.4669,0.7788,0.9979,0.9972,0.9778,0.9979,0.9825,0.9926,0.9934,0.9614,0.9806,0.9973,0.9942,0.9802,0.9889,0.9488,0.9836,0.9829,0.8848,0.8065,0.9977,0.9851,0.9733,0.989,0.9536,0.9745,0.9315,0.8412,0.9656,0.9875,0.9539,0.8957,0.9637,0.8696,0.9404,0.5089,0.3177,0.7391,0.9802,0.9821,0.9668,0.9913,0.9254,0.9696,0.9803,0.3437,0.2241,0.9966,0.9947,0.9894,0.9916,0.9492,0.9862,0.9858,0.8936,0.9457,0.9922,0.9546,0.9115,0.9636,0.933,0.9237,0.4227,0.2179,0.8192,0.9962,0.9934,0.9864,0.9911,0.9458,0.9868,0.9816,0.7917,0.923,0.9988,0.9988,0.9899,0.9992,0.992,0.9973,0.9968,0.9794,0.9902,0.9911,0.9849,0.9301,0.9874,0.9379,0.9593,0.9677,0.7058,0.7183,0.7328,0.5935,0.5682,0.4136,0.3493,0.4907,0.3738,0.3537,0.4664,0.991,0.9819,0.9831,0.9826,0.8677,0.9621,0.9674,0.7242,0.9675,0.9927,0.9625,0.9143,0.9795,0.9328,0.9537,0.5348,0.3933,0.7854,0.9958,0.9769,0.953,0.9846,0.9689,0.971,0.6073,0.4021,0.8726,0.9961,0.9771,0.9585,0.9851,0.9529,0.9697,0.9189,0.8234,0.9536,0.9861,0.9331,0.8077,0.9006,0.8569,0.8381,0.4744,0.357,0.542,0.9792,0.9569,0.9066,0.9354,0.8085,0.8742,0.896,0.39,0.707,0.9496,0.7883,0.566,0.6066,0.7035,0.4464,0.4607,0.3065,0.4671,0.999,0.9942,0.989,0.987,0.9928,0.9822,0.9918,0.9764,0.973,0.9961,0.9775,0.9804,0.9613,0.9791,0.9358,0.985,0.9457,0.9623,0.9724,0.9176,0.758,0.805,0.9386,0.6756,0.8813,0.7891,0.5881,0.989,0.9712,0.9472,0.9203,0.9508,0.9431,0.8716,0.8862,0.7288,0.8866,0.887,0.7495,0.9167,0.8159)
> x117 <-
c(0.8348,0.8431,0.8035,0.8696,0.9294,0.9068,0.9091,0.9138,0.684,0.8739,0.863,0.8024,0.7791,0.9295,0.9054,0.8399,0.8025,0.6344,0.8292,0.7621,0.7624,0.7426,0.2367,0.1979,0.186,0.1404,0.1102,0.1557,0.1038,0.1082,0.2334,0.3822,0.1703,0.1682,0.1392,0.2535,0.1039,0.1784,0.1346,0.2246,0.9876,0.9205,0.9295,0.8751,0.9531,0.8004,0.9567,0.853,0.9144,0.5808,0.3199,0.2418,0.2813,0.2823,0.2009,0.2859,0.1914,0.3296,0.9987,0.9967,0.9967,0.9967,0.9908,0.9946,0.9905,0.9814,0.9891,0.998,0.9876,0.9765,0.9774,0.9545,0.9382,0.9656,0.929,0.9377,0.9987,0.9981,0.9703,0.9982,0.9914,0.9936,0.9949,0.9747,0.9889,0.9979,0.9815,0.9528,0.9874,0.956,0.9711,0.8674,0.7032,0.961,0.9984,0.9986,0.9801,0.9988,0.9815,0.9949,0.996,0.9463,0.9707,0.9881,0.9853,0.9307,0.9912,0.9072,0.9512,0.9721,0.3181,0.2646,0.9958,0.9788,0.9821,0.9936,0.9318,0.9862,0.7072,0.3826,0.992,0.9971,0.9803,0.9718,0.9906,0.9203,0.9802,0.9254,0.8506,0.9715,0.9941,0.9931,0.9659,0.9974,0.9632,0.9837,0.9913,0.9044,0.9476,0.9986,0.9987,0.9911,0.9989,0.9921,0.9973,0.9968,0.9896,0.9932,0.9978,0.9737,0.9554,0.9428,0.9772,0.9147,0.9465,0.9102,0.9436,0.9843,0.9211,0.8242,0.8624,0.9042,0.8045,0.8816,0.7821,0.7954,0.8843,0.8348,0.7694,0.7244,0.5356,0.7091,0.6343,0.5641,0.684,0.9973,0.9832,0.986,0.9762,0.9895,0.9647,0.9844,0.9217,0.9804,0.9764,0.9517,0.9407,0.9451,0.7646,0.9096,0.9004,0.4232,0.8496,0.9855,0.9399,0.8921,0.9628,0.904,0.9246,0.3872,0.2227,0.7799,0.9984,0.9981,0.9886,0.999,0.9857,0.995,0.996,0.8505,0.8277,0.995,0.9933,0.9576,0.9952,0.9616,0.9774,0.9849,0.5254,0.5028,0.9936,0.9337,0.8397,0.8567,0.9311,0.7835,0.7122,0.5562,0.7214,0.9995,0.9965,0.9875,0.9964,0.9925,0.9914,0.9832,0.9398,0.9802,0.9819,0.8612,0.6822,0.7169,0.7969,0.5955,0.6835,0.5011,0.7269,0.9666,0.9566,0.8012,0.8921,0.6571,0.8565,0.8244,0.4484,0.4893,0.9891,0.991,0.9676,0.995,0.9287,0.9804,0.9877,0.3634,0.2966,0.9974,0.9982,0.9732,0.9992,0.977,0.9898,0.9944,0.5302,0.7719,0.9987,0.999,0.9946,0.9996,0.9889,0.9968,0.9984,0.7247,0.7517,0.996,0.9713,0.9235,0.982,0.9491,0.9461,0.5797,0.5024,0.8846,0.9995,0.9991,0.9952,0.9993,0.9959,0.9967,0.9968,0.9674)
> x118 <-
c(0.9695,0.8042,0.8334,0.6717,0.8568,0.5355,0.7418,0.8109,0.1564,0.1437,0.9991,0.9991,0.9926,0.9991,0.9965,0.9969,0.9962,0.9894,0.9917,0.9974,0.9776,0.9361,0.97,0.9652,0.9129,0.8833,0.8085,0.9204,0.9594,0.9635,0.8699,0.971,0.8137,0.9135,0.9367,0.2281,0.2131,0.9908,0.9557,0.8515,0.9628,0.9038,0.9242,0.5059,0.3953,0.6562,0.9734,0.928,0.8105,0.9517,0.8138,0.8981,0.322,0.2492,0.5501,0.9979,0.997,0.9903,0.9985,0.986,0.9927,0.995,0.7562,0.6656,0.9927,0.9843,0.9912,0.9875,0.9042,0.9813,0.9806,0.7695,0.9819,0.9786,0.9556,0.9562,0.9642,0.738,0.9225,0.9581,0.6527,0.903,0.9987,0.999,0.9889,0.9994,0.9896,0.9973,0.9979,0.9821,0.9917,0.9982,0.9984,0.9759,0.9988,0.9876,0.9949,0.9965,0.9656,0.9779,0.9994,0.9901,0.9877,0.9952,0.9838,0.9874,0.9698,0.8396,0.9965,0.9994,0.9953,0.9929,0.9953,0.9898,0.9894,0.9875,0.916,0.9938,0.9993,0.9963,0.9945,0.9971,0.9905,0.9946,0.9905,0.9723,0.9945,0.9977,0.9987,0.9859,0.9995,0.979,0.9954,0.9979,0.9056,0.9713,0.9923,0.9807,0.9818,0.9889,0.9064,0.967,0.9766,0.5037,0.9192,0.9985,0.996,0.9965,0.9964,0.9715,0.9937,0.9946,0.9424,0.9805,0.9992,0.9979,0.9988,0.9978,0.9907,0.9971,0.9962,0.973,0.9922,0.9992,0.9979,0.9981,0.9965,0.991
```

```
4,0.9962,0.9944,0.9893,0.9931,0.9993,0.9991,0.9956,0.9991,0.9978,0.9979,0.9966,0.995,0.9946,0.9996,0.9993,0.9974,0.9
993,0.9978,0.9987,0.9984,0.9978,0.9977,0.9995,0.9995,0.9968,0.9996,0.9977,0.9992,0.9987,0.9944,0.9962,0.9962,0.9928,
0.991,0.9933,0.9516,0.9847,0.9879,0.7737,0.9501,0.9989,0.9938,0.9762,0.9961,0.9874,0.991,0.7928,0.6551,0.8992,0.9989
,0.9922,0.9856,0.9943,0.9816,0.9875,0.9518,0.8256,0.9764,0.9861,0.9803,0.8569,0.9659,0.9081,0.9259,0.907,0.645,0.707
9,0.9971,0.9971,0.8196,0.9959,0.9738,0.9892,0.986,0.9802,0.9939,0.9925,0.9609,0.644,0.9067,0.9367,0.764,0.9216,0.936
4,0.28,0.9998,0.9982,0.9975,0.9976,0.9988,0.9939,0.9979,0.9903,0.9955,0.9897,0.9647,0.9452,0.9359,0.811,0.919,0.8963
,0.8137,0.9233,0.9999,0.9994,0.998,0.999,0.9994,0.9973,0.999,0.9959,0.9898,0.4929,0.1763,0.841,0.973,0.1534,0.828,0.
1491,0.1177,0.1693,0.9998,0.9986,0.9973,0.9976,0.9938,0.9937,0.9947,0.9881,0.9845,0.9998,0.9998)
> x119 <-
c(0.9984,0.9998,0.9994,0.9997,0.999,0.9994,0.9996,0.9972,0.9915,0.9935,0.9874,0.9798,0.9869,0.98,0.9903,0.9465,0.507
8,0.3725,0.4548,0.3187,0.2558,0.3493,0.2395,0.2743,0.4281,0.9614,0.902,0.7479,0.8354,0.8979,0.7156,0.9305,0.8203,0.4
844,0.9634,0.8902,0.8724,0.8254,0.8353,0.8226,0.6997,0.7451,0.7994,0.9769,0.9476,0.9738,0.9448,0.9167,0.9519,0.9253,
0.9343,0.8759,0.6855,0.6741,0.4223,0.5908,0.4635,0.5272,0.4488,0.1609,0.1778,0.9482,0.9048,0.8027,0.8662,0.6308,0.78
37,0.7806,0.3668,0.4735,0.9542,0.8525,0.6809,0.839,0.7255,0.7285,0.3137,0.191,0.3854,0.9824,0.9725,0.9509,0.9562,0.8
233,0.9484,0.9303,0.8003,0.8299,0.3157,0.1498,0.1226,0.1062,0.1543,0.1025,0.1157,0.1126,0.207,0.9937,0.9908,0.9595,0.
9918,0.9551,0.9748,0.976,0.6646,0.654,0.9741,0.965,0.8039,0.9432,0.887,0.8931,0.8651,0.664,0.7263,0.7518,0.5413,0.3
918,0.263,0.3081,0.321,0.1924,0.2089,0.2526,0.9983,0.9897,0.9865,0.9917,0.9746,0.9884,0.9775,0.9318,0.9742,0.9237,0.
8934,0.8298,0.8474,0.5757,0.8024,0.7719,0.1721,0.5939,0.976,0.9807,0.9329,0.9891,0.8449,0.9571,0.9784,0.3408,0.2821,
0.9974,0.9849,0.973,0.9876,0.9596,0.9775,0.9302,0.8315,0.9703,0.9977,0.9973,0.9865,0.9982,0.9864,0.9928,0.9931,0.878
1,0.8841,0.9979,0.9876,0.9775,0.9824,0.9798,0.9659,0.9746,0.929,0.9674,0.9978,0.9972,0.9878,0.9977,0.9882,0.9935,0.9
953,0.9822,0.9895,0.9943,0.9742,0.985,0.9542,0.9408,0.9497,0.923,0.925,0.958,0.9143,0.6529,0.5,0.4465,0.754,0.3641,0.
6202,0.5507,0.5476,0.1983,0.1084,0.834,0.731,0.1063,0.637,0.633,0.809,0.1406,0.2423,0.1066,0.679,0.567,0.1154,0.464
0,0.996,0.1068,0.1504,0.6976,0.7283,0.5571,0.7285,0.5642,0.6844,0.6371,0.3793,0.3433,0.6665,0.5314,0.476,0.3542,0.305
8,0.416,0.2642,0.2995,0.3211,0.5963,0.6337,0.4585,0.6246,0.5089,0.6125,0.532,0.3154,0.3717,0.4575,0.2706,0.2551,0.16
27,0.145,0.2045,0.1187,0.2123,0.2949,0.9965,0.9955,0.9632,0.9952,0.9864,0.9922,0.9892,0.9712,0.9768,0.2258,0.1512,0.
1267,0.1014,0.1077,0.114,0.73,0.833,0.1769,0.9871,0.9816,0.9386,0.984,0.9432,0.9574,0.9685,0.8816,0.8784,0.9988,0.99
81,0.9772,0.9981,0.9931,0.9958,0.9945,0.9765,0.9804,0.9991,0.9982,0.987,0.9983,0.9956)
> x120 <-
c(0.9963,0.995,0.9854,0.9868,0.9988,0.9981,0.9882,0.9982,0.9957,0.997,0.995,0.976,0.9724,0.9992,0.9988,0.9835,0.9984
,0.9966,0.9966,0.9942,0.9825,0.9872,0.9969,0.996,0.9742,0.9962,0.9856,0.9927,0.9897,0.9591,0.9533,0.2845,0.1826,0.18
92,0.1382,0.1241,0.1601,0.895,0.1091,0.2299,0.9984,0.9978,0.9816,0.9975,0.9939,0.9953,0.9924,0.9678,0.9642,0.9784,0.
9802,0.9496,0.985,0.9528,0.9741,0.9711,0.8643,0.7648,0.9789,0.979,0.8853,0.9763,0.9171,0.9629,0.9526,0.911,0.9075,0.
3276,0.1971,0.2323,0.1152,0.1484,0.1567,0.851,0.1257,0.3061,0.7979,0.6702,0.5377,0.599,0.5833,0.5398,0.5219,0.4939,0.
4629,0.7779,0.8193,0.5934,0.836,0.6098,0.768,0.6992,0.4322,0.5134,0.1356,0.1645,0.1074,0.1455,0.933,0.1406,0.1116,0.
538,0.704,0.7228,0.6349,0.6145,0.5252,0.34,0.5335,0.4384,0.4811,0.4425,0.7533,0.8094,0.7149,0.8753,0.666,0.8211,0.7
739,0.4041,0.5133,0.8882,0.8074,0.8248,0.6797,0.4617,0.745,0.6461,0.6217,0.7344,0.9879,0.9683,0.9318,0.9629,0.9551,0.
9318,0.9205,0.7252,0.6993,0.9994,0.9994,0.9967,0.9996,0.9975,0.9983,0.9984,0.9895,0.984,0.9993,0.992,0.9842,0.9893,
0.9938,0.9736,0.9185,0.8088,0.9714,0.9996,0.9958,0.996,0.9967,0.9957,0.9919,0.9466,0.8676,0.9935,0.9999,0.9995,0.999
1,0.9994,0.9993,0.9986,0.9977,0.991,0.996,0.9994,0.9985,0.9978,0.9971,0.9948,0.9971,0.993,0.9712,0.9846,0.9987,0.989
8,0.9407,0.9565,0.9857,0.8958,0.9608,0.9227,0.8931,0.9985,0.989,0.9429,0.9694,0.9883,0.9138,0.9302,0.8712,0.8671,0.9
89,0.967,0.916,0.9038,0.8912,0.9078,0.8323,0.6826,0.7587,0.9685,0.8397,0.6866,0.4907,0.7687,0.391,0.8025,0.5986,0.82
45,0.9991,0.994,0.992,0.9917,0.9923,0.9811,0.9863,0.9224,0.9877,0.9965,0.9855,0.9648,0.9878,0.9679,0.9716,0.6747,0.5
479,0.9265,0.991,0.9854,0.9771,0.9844,0.8879,0.9714,0.9748,0.6009,0.8786,0.9909,0.9922,0.9501,0.994,0.9329,0.9772,0.
9803,0.5027,0.5551,0.9879,0.9896,0.9418,0.9923,0.9324,0.964,0.9755,0.4608,0.5693,0.997,0.9834,0.9503,0.9833,0.9764,0.
9495,0.9339,0.8789,0.9583,0.8802,0.8574,0.6702,0.8229,0.6717,0.7337,0.7283,0.2915,0.355,0.9895,0.97,0.9777,0.958,0.
9131,0.9561,0.9345,0.8183,0.9021,0.9744,0.7974,0.7759,0.8543,0.806,0.7569,0.7445,0.6818)
> x121 <-
c(0.7977,0.9958,0.9808,0.94,0.9836,0.96,0.9578,0.6904,0.502,0.9004,0.9977,0.9881,0.9741,0.9893,0.9749,0.9766,0.9167,
0.7785,0.9628,0.9979,0.9959,0.9978,0.9965,0.9724,0.9949,0.9932,0.9416,0.9921,0.9996,0.996,0.9963,0.9949,0.9939,0.989
,0.9874,0.9182,0.9971,0.9647,0.8407,0.7389,0.8466,0.6548,0.7356,0.415,0.3187,0.7699,0.9975,0.9968,0.9762,0.9975,0.98
07,0.9916,0.993,0.9768,0.986,0.9993,0.9988,0.9895,0.999,0.9924,0.9968,0.9971,0.9451,0.9414,0.9948,0.9688,0.9156,0.98
02,0.8823,0.9457,0.7587,0.6525,0.9445,0.9726,0.8549,0.7699,0.9015,0.7361,0.8441,0.2726,0.1959,0.7495,0.9608,0.8386,0.
7716,0.8788,0.8008,0.8155,0.233,0.1676,0.6787,0.9145,0.6702,0.4947,0.558,0.6025,0.4567,0.3898,0.2683,0.4749,0.9673,
0.9501,0.8788,0.9235,0.6734,0.8797,0.8586,0.3948,0.7575,0.9956,0.9961,0.981,0.9972,0.9832,0.9919,0.9884,0.9254,0.957
8,0.9047,0.6796,0.4225,0.6521,0.6459,0.4984,0.3165,0.2295,0.3909,0.6732,0.5655,0.4821,0.4053,0.2924,0.4489,0.3184,0.
2646,0.3786,0.9359,0.9081,0.856,0.8411,0.6694,0.8436,0.7918,0.4865,0.5836,0.9926,0.9854,0.9807,0.978,0.8994,0.9614,0.
9568,0.8106,0.955,0.9909,0.952,0.8648,0.9493,0.9279,0.8844,0.6545,0.5075,0.7351,0.9858,0.9203,0.8432,0.9366,0.915,0.
8936,0.4377,0.2866,0.7649,0.9981,0.9908,0.9794,0.9916,0.9792,0.982,0.967,0.9284,0.9778,0.9832,0.9119,0.7456,0.804,0.
8514,0.6964,0.4469,0.3381,0.4956,0.9756,0.8982,0.6191,0.6696,0.7863,0.4774,0.6953,0.5099,0.4983,0.9984,0.9905,0.982
6,0.9743,0.9885,0.9545,0.9841,0.9581,0.965,0.9934,0.9655,0.9658,0.9452,0.9656,0.9893,0.9738,0.9107,0.9375)
> x1 <- c(x10,x11,x12,x13,x14,x15,x16,x17,x18,x19,x110,x111,x112,x113,x114,x115,x116,x117,x118,x119,x120,x121)
> x20 <-
c(0.4124,0.2964,0.1715,0.5756,0.3725,0.5027,0.6653,0.2263,0.449,0.6651,0.2799,0.1369,0.586,0.5354,0.5258,0.3253,0.33
21,0.577,0.45,0.8476,0.6118,0.671,0.6838,0.5547,0.4798,0.6326,0.5308,0.5274,0.4757,0.5999,0.2267,0.6055,0.832,0.7112
,0.6438,0.501,0.5979,0.3778,0.5693,0.3039,0.1702,0.253,0.961,0.393,0.2798,0.151,0.4351,0.729,0.7921,0.8272,0.7934,0.
8046,0.9005,0.3318,0.3958,0.2236,0.7507,0.7475,0.7899,0.8431,0.6882,0.8132,0.5877,0.5826,0.7355,0.9767,0.3388,0.6775
,0.9362,0.6776,0.824,0.8322,0.7313,0.7757,0.8112,0.3352,0.9137,0.7559,0.8725,0.7189,0.8818,0.4969,0.9039,0.5688,0.53
01,0.1323,0.1695,0.5465,0.6881,0.1643,0.6369,0.1278,0.2278,0.1928,0.1749,0.1722,0.319,0.1853,0.2597,0.3823,0.4673,0.
13,0.3722,0.4702,0.2074,0.1809,0.4568,0.5435,0.2069,0.2494,0.3286,0.3522,0.3153,0.2472,0.3015,0.3093,0.1807,0.1283,0.
1295,0.1793,0.1659,0.2235,0.1955,0.1717,0.2549,0.3325,0.2374,0.3291,0.1623,0.4239,0.953,0.1402,0.1266,0.2289,0.4629
,0.2466,0.359,0.2574,0.3253,0.2071,0.1619,0.1054,0.1392,0.2068,0.1169,0.952,0.1231,0.103,0.679,0.801,0.923,0.834,0.1
819,0.6138,0.5734,0.5631,0.9123,0.9219,0.8435,0.7377,0.8268,0.8986,0.1578,0.892,0.9229,0.7821,0.8712,0.8876,0.6824,0.
7781,0.8623,0.8121,0.8269,0.9908,0.6492,0.255,0.6538,0.8567,0.6977,0.8503,0.8717,0.9532,0.1281,0.8829,0.9425,0.8533
,0.908,0.642,0.8723,0.4736,0.1343,0.3568,0.6397,0.7399,0.1415,0.1367,0.1278,0.1156,0.891,0.7082,0.9678,0.951,0.9915,
0.9693,0.9834,0.9161,0.9619,0.9405,0.977,0.1535,0.7621,0.7907,0.9517,0.9914,0.4824,0.3099,0.9927,0.7589,0.5238,0.926
1,0.9258,0.996,0.9734,0.7771,0.7991,0.5621,0.8126,0.7618,0.8996,0.9246,0.9561,0.9946,0.988,0.7559,0.5574,0.1251,0.99
```



```

74,0.9551,0.488,0.9883,0.9727,0.9986,0.9681,0.9292,0.5194,0.514,0.2363,0.2875,0.1146,0.5212,0.7415,0.8922,0.1298,0.3
216,0.722,0.9431,0.992,0.754,0.706,0.9383,0.9922,0.9508,0.5097,0.876,0.5875,0.9669,0.9284,0.9856,0.6177,0.7473,0.980
3,0.9631,0.9964,0.7994,0.373,0.9551,0.8447,0.9517,0.9266,0.4101,0.996,0.7859,0.5604,0.9763,0.9313,0.8665,0.7874,0.95
09,0.9544,0.9823,0.6913,0.9832,0.9373,0.8187,0.9452,0.815,0.6737,0.1818,0.738,0.9764)
> x21 <-
c(0.989,0.9827,0.7853,0.1918,0.9821,0.9977,0.9081,0.8032,0.8784,0.9852,0.8474,0.7121,0.5031,0.9774,0.1821,0.1075,0.9
973,0.9991,0.9592,0.998,0.7486,0.8545,0.5481,0.989,0.1814,0.5378,0.7428,0.662,0.6972,0.1142,0.5205,0.8045,0.8205,0.9
952,0.9217,0.9864,0.5159,0.5095,0.7303,0.6391,0.9711,0.4165,0.1529,0.753,0.1123,0.8404,0.9438,0.8997,0.1429,0.9253,0
.9356,0.1355,0.8827,0.8118,0.2312,0.8699,0.9795,0.1978,0.4321,0.2405,0.2192,0.4704,0.2662,0.2334,0.6528,0.9322,0.993
5,0.9931,0.9981,0.959,0.9268,0.9269,0.4624,0.5964,0.9923,0.6667,0.8838,0.9936,0.5201,0.9042,0.9187,0.7367,0.9853,0.7
185,0.8597,0.9933,0.979,0.8889,0.877,0.8057,0.9826,0.8594,0.9629,0.9397,0.8342,0.8055,0.8575,0.6669,0.487,0.9557,0.9
604,0.728,0.9903,0.8676,0.6859,0.4376,0.9921,0.9816,0.8066,0.9796,0.754,0.1165,0.774,0.9144,0.9721,0.4575,0.802,0.94
34,0.2406,0.4188,0.9397,0.7372,0.8427,0.3907,0.5608,0.9503,0.9341,0.9879,0.1544,0.8018,0.5034,0.2221,0.5923,0.6887,0
.1761,0.9861,0.9454,0.806,0.8489,0.7885,0.8874,0.9092,0.5295,0.9173,0.2792,0.2303,0.2747,0.6127,0.2656,0.3826,0.2745
,0.6824,0.9607,0.9652,0.9672,0.631,0.6954,0.9034,0.8744,0.9858,0.6644,0.309,0.7186,0.2294,0.9418,0.9256,0.1718,0.196
3,0.825,0.9955,0.8484,0.9976,0.8666,0.993,0.4062,0.5427,0.9912,0.1924,0.2427,0.651,0.2631,0.831,0.3857,0.2717,0.9432
,0.4914,0.5026,0.9738,0.756,0.9241,0.113,0.2188,0.755,0.854,0.3377,0.3026,0.8786,0.6424,0.7377,0.886,0.7991,0.865,0.
8628,0.917,0.891,0.8692,0.1276,0.7595,0.9754,0.4472,0.1489,0.1978,0.128,0.277,0.1064,0.1203,0.1863,0.4104,0.3261,0.4
928,0.752,0.9795,0.9664,0.9874,0.91,0.6235,0.6645,0.6713,0.1965,0.3631,0.5282,0.8114,0.2852,0.501,0.5852,0.9599,0.21
94,0.3152,0.6245,0.9496,0.5516,0.4353,0.9642,0.7695,0.5537,0.5551,0.8648,0.9275,0.8323,0.5434,0.8984,0.7948,0.6261,0
.735,0.5379,0.2665,0.7357,0.8707,0.8955,0.9091,0.7165,0.1612,0.347,0.972,0.9602,0.7464,0.7106,0.2174,0.8015,0.8128,0
.8,0.943,0.8323,0.1369,0.9744,0.9037,0.4436,0.8934,0.2556,0.5313,0.9413,0.9334,0.5459,0.6141,0.8573,0.6971,0.6358,0.
9652,0.1683,0.8147,0.5704,0.5374,0.6681,0.9787,0.4658,0.369,0.5784,0.7887,0.8312,0.8151)
> x22 <-
c(0.9039,0.2035,0.8515,0.8479,0.3769,0.783,0.7518,0.7107,0.3946,0.5436,0.49,0.245,0.9545,0.9802,0.9867,0.7441,0.1582
,0.8855,0.9318,0.9899,0.878,0.6823,0.7455,0.4507,0.9644,0.963,0.3595,0.1492,0.7173,0.9954,0.6326,0.9982,0.434,0.9749
,0.9012,0.9924,0.1464,0.7735,0.3231,0.8582,0.1205,0.3051,0.6071,0.789,0.761,0.4577,0.2674,0.136,0.9608,0.791,0.4268,
0.9329,0.6788,0.9467,0.7994,0.8871,0.3428,0.647,0.489,0.1733,0.2559,0.1429,0.1635,0.4036,0.589,0.3491,0.5107,0.7049,
0.7217,0.6854,0.5781,0.633,0.6748,0.4171,0.1682,0.67,0.1335,0.1769,0.721,0.4883,0.1803,0.504,0.4393,0.869,0.9512,0.9
82,0.9983,0.9162,0.9063,0.8911,0.2773,0.4765,0.9766,0.9241,0.5134,0.4313,0.5606,0.9153,0.189,0.393,0.4736,0.8907,0.9
427,0.9478,0.9859,0.5263,0.583,0.5285,0.7951,0.5406,0.5811,0.3213,0.2482,0.7323,0.3326,0.2433,0.4084,0.8379,0.7985,0
.7177,0.9653,0.6453,0.4876,0.9554,0.9311)
> x2 <- c(x20,x21,x22)
> ks.test(x1, x2, alternative = "two.sided", exact=FALSE)

```

Asymptotic two-sample Kolmogorov-Smirnov test

```

data: x1 and x2
D = 0.37201, p-value < 2.2e-16
alternative hypothesis: two-sided

```

```

Warning message:
In ks.test.default(x1, x2, alternative = "two.sided", exact = FALSE) :
  p-value will be approximate in the presence of ties
> # Create data frames for plotting
> df_qty <- data.frame(AlphaMissenseScore = x1, Group = " Other Polar")
> df_other <- data.frame(AlphaMissenseScore = x2, Group = " QTY-code")
> df <- rbind(df_other, df_qty)
>
> # Density Plot
> ggplot(df, aes(x = AlphaMissenseScore, color = Group)) +
+   geom_density() +
+   labs(title = "Density Plot of AlphaMissense Scores",
+        x = "AlphaMissense Score",
+        y = "Density",
+        color = "Group") +
+   theme_minimal()
>
>

```