# Sell\_stocks

[문제 설명]

김제로에게는 미래의 주식시장이 어떻게 흘러갈지 정보를 가지고 있습니다. 김제로는 주식을 매입하고 판매해야 하는 직업을 가지고 있는데, 항상 손해만을 봐야합니다. 김제로는 매년 1회 구매하고 해당 년도가 아닌 이후 년도부터 판매가 가능합니다.

그렇지만 손해를 최소화하고 싶기 때문에 손해가 최소가 되는 구매와 판매 시점을 예상할 예정인데 이 때, 최소로 손해보는 값을 반환해주세요.

예를 들어 [5, 10, 3] 이라는 1년차, 2년차, 3년차의 정보가 주어진다면, 1년차 (5)에 구매하여 3년차 (3)에 판매하는 것이 2년차 (10)에 구매하여 3년차 (3)에 판매하는 것보다 손해가 덜 나게 되고, 그 결과 5-3 = 2 이기 때문에 2의 값을 반환해주시면 됩니다.

[제한 사항]

- prices의 길이는 10,000 이하 입니다.

- 항상 유효한 값만 입력됩니다.

- 모든 값은 중복되지 않습니다.

- 각 연도별 값은 1,000,000 이하입니다.

[입력 형식]

- prices 배열 안에 각 연도별 정보가 순차적으로 담겨있습니다.

[출력 형식]

- 가장 손해를 최소로 볼 수 있는 연도 조합에 따른 손해액을 반환해주세요

제한 시간 : 30분

문제 유형 : Greedy Algorithm

난이도 : 중

매개변수

|  |
| --- |
| prices |
| Array / list |

리턴타입

|  |
| --- |
| 리턴타입 |
| int |

초기코드 Python

def solution(prices):

  '''

:param prices: list

  :return: int

  '''

  answer = 0

  return answer

초기코드JavaScript

/\*\*

 \* @param prices {array}

 \* @return int

 \*/

function solution(prices) {

    return 0

}

테스트 케이스

예제용

|  |
| --- |
| 입력값 prices |
| [5, 10, 3] |

|  |
| --- |
| 출력값 |
| 2 |

채점용

|  |  |
| --- | --- |
| 입력값 prices | 출력값 |
| [20, 7, 8, 2, 5] | **2** |

|  |  |
| --- | --- |
| 입력값 prices | 출력값 |
| [2, 3, 4, 1] | **1** |

|  |  |
| --- | --- |
| 입력값 prices | 출력값 |
| [2, 9, 8, 7, 6, 5, 4, 1] | **1** |

|  |  |
| --- | --- |
| 입력값 prices | 출력값 |
| [545042489, 790539397, 260285469, 568911395, 123305100, 759382529, 655648279, 824396964, 309914704, 93727114, 624099786, 543424992, 165745699, 516620249, 344286932, 571863547, 637677121, 55645097, 396458210, 361426093, 487766526, 144326659, 589058114, 68048358, 589400483, 216606433, 346124804, 735053098, 869596065, 94347669, 273418321, 149061968, 731757978, 2910803, 816288453, 125301443, 639562227, 508058340, 506351078, 650796938, 442210814, 852861801, 374594456, 114567448, 998074317, 913461650, 891870800, 800984047, 438643181, 133463124, 784762974, 220119017, 194597523, 407193593, 71399817, 994767489, 795772234, 774808400, 616835814, 51641231, 903906768, 839144792, 150079442, 888994755, 853911771, 805845306, 216495684, 858496463, 175724232, 885979465, 176379062, 200150826, 874642946, 253072085, 714250079, 680493076, 561637223, 974813840, 385291297, 339513495, 941886908, 631689483, 421384727, 733346405, 876816970, 485276114, 471517514, 766418074, 404740996, 966010568, 496798637, 670123936, 323602026, 579585497, 802739462, 471098512, 539791908, 620071161, 249336487, 381567525, 965910841, 420350716, 412200062, 571077617, 583635444, 71531726, 973317018, 245914138, 670270445, 582880010, 125518317, 463349810, 357358225, 673996386, 784421165, 359602162, 744873611, 149542256, 179025789, 852578052, 943420828, 665798056, 531957065, 572799485, 796137592, 959809850, 615416039, 846749801, 162859658, 807886703, 334709017, 759114496, 266813178, 835985255, 798806254, 153682505, 36005184, 219628081, 611914390, 766720465, 818683779, 530408578, 941419935, 810283475, 367307481, 110505246, 881818314, 576042468, 118789928, 406756556, 908871225, 490700252, 136889910, 648494829, 426583982, 539328004, 856089384, 579670946, 160972610, 522222376, 246156812, 439112273, 775512787, 828801964, 773133345, 13102951, 688427032, 642572957, 745121469, 607209961, 582745929, 768991431, 270367179, 643202887, 371188242, 887768485, 194989059, 975441363, 367782618, 626412170, 244116258, 430410930, 454833670, 496074956, 309162071, 660297819, 164659811, 979094071, 629459492, 149374874, 543193840, 108227381, 656543991, 274894585, 19445660, 779639194, 936435919,  636689067, 109750011, 606807129, 986500860] | **99727** |

|  |  |
| --- | --- |
| 입력값 prices | 출력값 |
| [470950916, 87649523, 778276597, 64802558, 637028099, 265325078, 698248067, 171309796, 514621831, 936070476, 661147965, 235379231, 353279781, 504854716, 361739097, 799163564, 195547618, 936123320, 847932318, 465633870, 707282094, 46881352, 534933581, 173594571, 596317077, 22399474, 772237029, 701435829, 245301414, 356820106, 582481998, 529651983, 698281889, 87538407, 214257075, 432998589,  730389513, 236825712, 77522456, 449253358, 32912880, 218590516, 276684889, 902428898, 496737619, 187038669, 932300504, 780791848, 446577135, 797475056, 908648966, 456869989, 675131082, 371444865,  789576375, 398399835, 824337248, 542073071, 43066918, 583364493, 930967981, 551898861, 621347992, 631422875, 470959721, 31562047, 778739486, 424681177, 522556800, 650890169, 937831057, 641800788,  967121257, 851430121, 452819394, 703310922, 297241579, 636031325, 304786479, 979642686, 385635488, 226196803, 412152737, 668905276, 500162693, 678132618, 897646086, 787174116, 253179833, 141269721, 833223879, 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570338944, 248174922, 55509063, 42244808, 687197953, 131114526, 241271049, 485545010, 193284730, 95085839, 339470034, 110927145, 544639229, 627785389, 44638516, 738957571, 159282299, 426682437, 515285565, 736552255, 5304267, 18661408, 346958903, 686249805, 931920175, 622890762, 488273208, 272971566, 553617020, 560203371, 524895021, 367921382, 716040043, 571493706, 149949397, 135013926, 32183904, 142501280, 330637260, 154127437, 756645204, 216738491, 786944223, 723092574, 174356226, 202238294, 100825121, 784722174, 722201026, 167679656, 476473176, 251858266, 932160642, 190213142, 274133292, 743701449, 710422321, 899919438, 401898091, 733631987, 18807656, 533837341, 262151157, 663408421, 892147591, 932979618, 928366668, 612687546, 825191389, 32627859, 121450743, 999598546, 854172759, 740373708, 986422769, 726400713, 644899585, 231579429, 707472884, 887811492, 422908686, 716155212, 699256082, 619747931, 114453399, 374278128, 706356023, 171033585, 649564336, 51767282, 341569680, 930331433, 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665277504, 646986529, 698148111] | **1316** |