

MysteryTwister C3

THE CRYPTO CHALLENGE CONTEST

NUMBER SEQUENCE (A REALLY LONG ONE) - PART 3

Author: Viktor Veselovsky

August 2011

Here are the first 251 numbers of a sequence ($a_1, a_2, \dots, a_{250}, a_{251}$):

(1, 4, 8, 13, 16, 19, 25, 29, 32, 35, 39, 46, 49, 52, 57, 61, 64, 67, 71, 76, 79, 82, 90,
94, 97, 100, 104, 110, 113, 116, 121, 125, 128, 131, 135, 140, 143, 146, 152, 156,
159, 162, 166, 175, 178, 181, 186, 190, 193, 196, 200, 205, 208, 211, 218, 222,
225, 228, 232, 238, 241, 244, 249, 253, 256, 259, 263, 268, 271, 274, 280, 284,
287, 290, 294, 301, 304, 307, 312, 316, 319, 322, 326, 331, 334, 337, 347, 351,
354, 357, 361, 367, 370, 373, 378, 382, 385, 388, 392, 397, 400, 403, 409, 413,
416, 419, 423, 431, 434, 437, 442, 446, 449, 452, 456, 461, 464, 467, 474, 478,
481, 484, 488, 494, 497, 500, 505, 509, 512, 515, 519, 524, 527, 530, 536, 540,
543, 546, 550, 557, 560, 563, 568, 572, 575, 578, 582, 587, 590, 593, 601, 605,
608, 611, 615, 621, 624, 627, 632, 636, 639, 642, 646, 651, 654, 657, 663, 667,
670, 673, 677, 688, 691, 694, 699, 703, 706, 709, 713, 718, 721, 724, 731, 735,
738, 741, 745, 751, 754, 757, 762, 766, 769, 772, 776, 781, 784, 787, 793, 797,
800, 803, 807, 814, 817, 820, 825, 829, 832, 835, 839, 844, 847, 850, 859, 863,
866, 869, 873, 879, 882, 885, 890, 894, 897, 900, 904, 909, 912, 915, 921, 925,
928, 931, 935, 943, 946, 949, 954, 958, 961, 964, 968, 973, 976, 979, 986, 990,
993, 996, 1000)

Assignment

Find 100 numbers of this sequence starting with the 10001st number $(a_{10001}, \dots, a_{10100})$

Reduce these numbers modulo 7.

This reduced sequence is the solution and it is to be entered in the format $(1,5,0,6, \dots, 2)$ without spaces.