Tarea 9 – Primera Parte

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//

// main.cpp

// Tarea9

//

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//

//Primera parte

// EXAMEN PRÁCTICO #2 ADA EM17

#include <cstdlib>

#include <iostream>

#include <queue>

using namespace std;

const int TAM = 15;

const int MAX = 500;

int datos1[TAM] = {150, 807, 963, 323, 331, 618, 329, 952, 311, 294, 379, 746, 995, 803, 871};

int datos[MAX] = { 150, 807, 963, 323, 331, 618, 329, 952, 311, 294, 379, 746, 995, 803, 871, 839, 168, 472, 950, 249, 173, 650, 681, 501, 266, 165, 703, 398, 441, 920, 755, 898, 900, 132, 581, 432, 475, 792, 905, 892, 438, 274, 586, 417, 163, 953, 375, 325, 802, 382, 764, 333, 491, 741, 586, 788, 293, 730, 807, 790, 606, 222, 290, 618, 334, 415, 856, 740, 235, 800, 824, 251, 128, 826, 876, 548, 230, 331, 902, 555, 565, 960, 848, 902, 157, 704, 627, 447, 726, 523, 424, 485, 763, 321, 253, 846, 315, 835, 786, 463, 677, 394, 863, 245, 391, 637, 672, 478, 902, 414, 703, 574, 362, 624, 537, 981, 283, 499, 159, 471, 589, 796, 157, 795, 361, 882, 880, 319, 540, 396, 746, 552, 468, 525, 701, 654, 398, 771, 606, 944, 388, 709, 189, 400, 997, 546, 378, 162, 973, 798, 338, 986, 484, 966, 167, 910, 825, 971, 939, 161, 644, 561, 778, 987, 859, 321, 126, 913, 498, 207, 263, 201, 608, 410, 855, 130, 555, 668, 415, 377, 331, 656, 723, 416, 265, 356, 304, 709, 759, 719, 480, 394, 325, 785, 233, 838, 754, 563, 686, 634, 619, 904, 142, 999, 189, 923, 416, 898, 314, 446, 721, 909, 624, 361, 996, 250, 172, 499, 370, 874, 506, 416, 120, 701, 965, 311, 928, 165, 100, 553, 492, 127, 482, 554, 739, 174, 743, 385, 274, 962, 204, 900, 604, 466, 558, 555, 196, 558, 639, 962, 195, 589, 187, 355, 763, 347, 182, 792, 878, 413, 452, 226, 497, 201, 831, 722, 500, 785, 141, 245, 877, 774, 645, 223, 692, 963, 667, 960, 571, 615, 666, 362, 615, 939, 290, 217, 627, 752, 267, 764, 558, 919, 802, 895, 398, 856, 122, 570, 868, 702, 474, 741, 466, 131, 560, 676, 761, 494, 920, 127, 150, 841, 334, 788, 492, 659, 123, 756, 894, 630, 854, 628, 180, 552, 909, 586, 693, 897, 839, 519, 848, 510, 272, 522, 948, 436, 270, 655, 788, 518, 103, 545, 915, 207, 525, 659, 690, 203, 959, 912, 340, 771, 302, 447, 296, 313, 717, 246, 843, 747, 207, 214, 663, 692, 217, 266, 449, 247, 269, 844, 916, 558, 987, 478, 779, 325, 244, 209, 388, 240, 840, 776, 619, 948, 804, 499, 457, 514, 505, 231, 137, 624, 903, 865, 347, 102, 411, 833, 100, 421, 950, 501, 592, 966, 575, 758, 996, 404, 630, 560, 404, 698, 243, 723, 923, 308, 951, 140, 221, 217, 166, 356, 958, 994, 570, 264, 670, 175, 466, 555, 586, 923, 293, 347, 561, 273, 383, 984, 170, 476, 439, 747, 557, 441, 677, 817, 875, 545, 841, 416, 430, 904, 557, 901, 250, 358, 965, 799, 372, 788, 627, 137, 159, 503, 153, 583, 509, 386, 624, 581, 702, 735, 949, 950, 880, 345, 521, 410, 529, 944, 491, 353, 528, 622, 514, 355, 639, 368, 591, 768, 640, 203, 865, 115, 246, 465, 491, 362, 894, 664};

// Problema 1

int mayoresimo (int datos[MAX], int k)

{

priority\_queue<int> queueDatos;

for(int i=0; i<MAX; i++)

{

queueDatos.push(datos[i]);

}

while(k-1>0)

{

queueDatos.pop();

k--;

}

return queueDatos.top();

}

int main()

{

// Ejecución del problema 1

cout << "PROBLEMA #1 - k-esimo mayor" << endl;

int k;

cout << "Cual es el valor de k para obtener el k-esimo dato mayor? ";

cin >> k;

cout << "El k-esimo mayor de los datos es: " << mayoresimo(datos, k) << endl;

system("PAUSE");

return EXIT\_SUCCESS;

}