#include <iostream>

using namespace std;

/\*

1. Одномерный массив беззнаковых целых чисел;

2. Указатель на тип

unsigned int;

3. Статический одномерный

массив символов;

4. Указатель на массив символов;

5. Трехмерный массив целых чисел;

6. Указатель на двумерный

массив целых чисел.

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int main() {

int arr[5] = {1, 2, 3, 4, 5};

int \*intPtr;

static double dblArr[5] = {1.1, 2.1, 3.3, 4.4, 5};

char \*\*charPtr;

int arr3d[3][2][1] = {{{1}, {2}},

{{3}, {5}},

{{4}, {1}}};

int \*intPtr2D;

//task1

cout << "Show array of integers" << endl;

for (int i: arr) {

cout << i << " ";

}

cout << endl;

//task2

cout << "Input values into array and display" << endl;

for (int &i: arr) {

int num;

cin >> num;

i = num;

}

//task3

for (int i: arr) {

cout << i << " ";

}

cout << endl;

//task4

cout << "display address of ptr, address of array and value in ptr" << endl;

intPtr = arr;

cout << &intPtr << " " << &arr << " " << intPtr << endl;

//task5

cout << "feel array of double and display" << endl;

for (double i: dblArr) {

cout << i << " ";

}

cout << endl;

for (int i = 0; i < 5; i++) {

double num;

cin >> num;

dblArr[i] = num;

}

for (double i: dblArr) {

cout << i << " ";

}

cout << endl;

//task2.7

cout << "Create dynamic array" << endl;

intPtr = new int[5];

for (int i = 0; i < 5; i++) {

cin >> intPtr[i];

}

for (int i = 0; i < 5; i++) {

cout << intPtr[i] << " ";

}

cout << endl;

//task2.8

delete[] intPtr;

cout << "Create dynamic matrix " << endl;

charPtr = new char \*[5];

for (int i = 0; i < 5; i++) {

charPtr[i] = new char[2];

}

for (int i = 0; i < 5; i++) {

for (int j = 0; j < 2; j++) {

cout << "Inter element " << "[" << i << "][" << j << "] ";

cin >> charPtr[i][j];

}

}

cout << endl;

for (int i = 0; i < 5; i++) {

for (int j = 0; j < 2; j++) {

cout << charPtr[i][j];

}

cout << endl;

}

cout << endl;

//task2.9

cout << "Display any value in 3d array" << endl;

cout << arr3d[2][1][0] << endl;

//task 2.10

cout << "task 10-11" << endl;

cout << \*arr3d[0] << endl;

//task 2.11

intPtr2D = &arr3d[2][1][0];

cout << \*intPtr2D << endl << intPtr2D << endl;

return 0;

}