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// File: HW\_1d.cpp

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// Programmer: Nour Shinnawi

// Class: CIS 17A

// Instructor: Dennis Rainey

//

// Description:

// This function will search for the user's ID number

// and tell them its location in an array. If the ID

// number cannot be located in the list the user will

// be notified that it is not available.

// ====================================================

#include <iostream>

using namespace std;

int searchList(const int[], int, int);

// ====== main ========================================

//

// ====================================================

int main()

{

const int size = 5;

int idNumbers[size] = { 1478, 1234, 6254, 8569, 4526 };

int num;

int result;

cout << "Enter the ID number that you would like to find: ";

cin >> num;

result = searchList(idNumbers, size, num);

if (result == -1)

{

cout << "That ID number could not be found" << "\n";

}

else

{

cout << "Your ID number was located at position " << (result + 1) << "\n";

}

return 0;

}// end of main()

// ====================================================

// ============ searchList =============================

// This function will search for the ID number entered

// by the user.

//

// Input:

// A value will be entered by the user that will

// represent the ID number that needs to be found.

//

// Output:

// The function will take the number and search for it.

// If the function returns -1, then the number entered

// by the user is not in the list.

// ======================================================

int searchList(const int list[], int numElems, int value)

{

int index = 0;

int position = -1;

bool found = false;

while (index < numElems && !found)

{

if (list[index] == value)

{

found = true;

position = index;

}

index++;

}

return position;

}// end of searchList()

// ====================================================

/\* ==== OUTPUT =========================================

Enter the ID number that you would like to find: 6254

Your ID number was located at position 3

Press any key to continue . . .

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Enter the ID number that you would like to find: 5489

That ID number could not be found

Press any key to continue . . .

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