#include <iostream>

#include <conio.h>

using namespace std;

/\*

Linear Search

Description:

Searches array recursively for value 10.\*/

int linearSearch(int array[],int counter) {

--counter;

if (counter < 0)

return -1; // value not found

if (array[counter] == 8)

return (counter+1); // found value at returned position (index starting with 1)

else

return linearSearch(array,counter); // continue search

}

/\*

Conventional entrypoint of the application

Description:

Allocates an array of 100 elements with values as even numbers starting with 0 and then calls the linearSearch function.\*/

int main() {

const int arraySize = 10;

int a[arraySize];

register int i = arraySize;

while (i) {

--i;

a[i] = 2 \* i;

cout<<a[i]<<" ";

}

int element = linearSearch(a,arraySize);

if (element < 0) { // element not found

cout << "Value not found." << endl;

}

else { // element found

cout << "Found value in element # " << element << endl;

}

getch();

return 0;

}