// Linear Search

#include<iostream>

using namespace std;

void ArrayInput(int arr[], int Size) {

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

cout << "Enter element " << i + 1 << " : ";

cin >> arr[i];

}

}

void LinearSearch(int arr[], int Size, int Key) {

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

if (arr[i] == Key) {

cout << "\nElement found at index : " << i << endl;

return;

}

}

cout << "\nelement not found" << endl;

}

int main() {

int arr[1000];

int size = 0, key = -1;

cout << "Enter size of array (max 1000): ";

cin >> size;

ArrayInput(arr, size);

cout << "\nEnter element to find: ";

cin >> key;

LinearSearch(arr, size, key);

return 0;

}

/\*

// SIMPLE CODE

#include<iostream>

using namespace std;

int LinearSearch(int arr[], int Size, int Key) {

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

if (arr[i] == Key) {

return i;

}

}

return -1;

}

int main() {

int arr[1000];

int size = 0, key = -1;

cout << "Enter size of array (max 1000): ";

cin >> size;

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

cout << "Enter element " << i + 1 << " : ";

cin >> arr[i];

}

cout << "\nEnter element to find: ";

cin >> key;

cout << "Element found at index: " << LinearSearch(arr, size, key) << endl;

return 0;

}

\*/

Interactive and straightforward both