* Binary Search program

#include <iostream>

using namespace std;

int binarySearch(int arr2[] , int n , int d) {

int i = 0;

while(i <= n) {

int mid = (i + n) / 2;

if(arr2[mid] == d) {

return mid;

}

else if(d > arr2[mid]) {

i = mid + 1;

}

else {

n = mid - 1;

}

}

return -1;

}

int main() {

int len;

int dele;

cout<<"Enter length of an Array : ";

cin>>len;

int arr[len];

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

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

cin>>arr[i];

}

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

cout<<i+1<<" : "<<arr[i]<<endl;

}

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

for (int j = i+1; j < len; j++) {

if(arr[i] > arr[j]) {

int temp = arr[i];

arr[i] = arr[j];

arr[j] = temp;

}

}

}

cout<<"Sorted"<<endl;

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

cout<<i+1<<" : "<<arr[i]<<endl;

}

cout<<"Enter Element to find in Array : ";

cin>>dele;

int result = binarySearch(arr , len , dele);

if(result == -1) {

cout<<"Element Not Found !!!";

}

else {

cout<<dele<<" Found At Index : "<<result;

}

return 0;

}