https://course.acciojob.com/idle?question=a2efabc9-bc03-4d63-b63a-f66bf457cc52

- EASY
- Max Score: 30 Points

Find position of an element

Find position of an element in a sorted array in O(logn) time.

Input Format

Input consists of three lines.

First line contains the size of the array n

Second line contains the array space separated of size n

third line contains the number whose address is to be found

Output Format

Return the index of the key. If the key is not present, return -1.

Example 1

Input

```
6
3 5 7 9 10 90
10
```

Output

```
4
```

Explanation

10 present on the index 4 of the array given.

Example 2

Input

```
11
3 5 7 9 10 90 100 130 140 160 170
106
```

Output

```
-1
```

Explanation

-1 is returned because 106 doesn't exist in the array.

Constraints

1 <= n <= 10 ^ 4

Topic Tags

- **Binary Search**

My code

```
// in java
import java.io.*;

import java.util.*;

class Accio {
```

```
    static int findPos(int arr[],int key){
            int l=0,r=(arr.length)-1;
        while(l<=r)
                        {
                            int mid=(l+r)/2;
                            if(key==arr[mid])
                                return mid;
                            if(key<arr[mid])
                                r=mid-1;
                                else l=mid+1;

                        }
            return -1;
    }
}

public class Main {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int n, m;
        n = sc.nextInt();
        int arr[] = new int[n];
        for(int i=0;i<n;i++)
            arr[i] = sc.nextInt();
        m = sc.nextInt();
        Accio Obj = new Accio();
        int result = Obj.findPos(arr, m);
        System.out.print(result);
    }
}
```