

Binary Search

Given a sorted integer array (in ascending order) and an element x. You need to search this element x in the given input array using binary search. Return the index of element in the input.

Sample Input

```
7
1 3 7 9 11 12 45
3
```

Sample Output

```
1
```

Sample Input

```
7
1 2 3 4 5 6 7
9
```

Sample Output

```
-1
```