

```
import java.util.*;
public class MyClass {
    public static void main(String args[]) {
        int arr[] = {12,22,43,54,67};
        int l = arr.length;
        int x;
        int found=0;
        System.out.println("Enter the element to be found");
        Scanner sc = new Scanner(System.in);
        x = sc.nextInt();
        int first = 0;
        int last = l;
        int mid = (first+last)/2;

        while(first<=last){

            if(x<arr[mid]){
                last = mid-1;
            }

            else if(arr[mid]==x){
                found=1;
                System.out.println("Element found at index "+mid);
                break;
            }

            else if(x>arr[mid]){
                first = mid+1;
            }

            mid = (first+last)/2;
        }

        if(found==0)
            System.out.println("Element not found");
    }
}
```