

```
1
2 /**
3  * Write a description of class BinarySearch here.
4  *
5  * @author (Yousuf Borna)
6  * @version (8/27/2024)
7  */
8 public class BinarySearch
9 {
10     public static void main(String args[]){
11         int[] arr = {12,14,16,22,25};
12         int target = 22;
13
14         int answer = binarySearch(arr,target);
15         System.out.println("Binary Search address");
16         System.out.println(answer);
17     }
18
19     public static int binarySearch(int arr[], int target){
20
21         int start=0;
22         int end = arr.length -1;
23
24         while(start <= end){
25
26             int mid = start + (end -start)/2;
27
28             if(target > arr[mid]){
29
30                 start = mid+1;
31             }
32             else if(target < arr[mid]){
33
34                 end = mid-1;
35
36             }else{
37                 return mid;
38             }
39
40         }
41
42         return -1;
43     }
44 }
45
```