

```

1 def linear_search(arr, target):
2     for i in range(len(arr)):
3         if arr[i] == target:
4             return i
5     return -1
6
7 #Input from user
8 arr=input("Enter the list of elements seperated by spaces:").split()
9 arr=[int(x) for x in arr]
10 # convert input elements to integers
11 target=int(input("Enter the target element to search for:"))
12 # Perform linear search
13 result=linear_search(arr, target)
14 if result !=-1:
15     print(f"Element {target} is present at index {result}.")
16 else:
17     print(f"Element {target} is not present in the array.")
18
19 #Kiran
20
21 #23A91A0482
22
23

```

Enter the list of elements seperated by spaces:2 3 4 6 5
Enter the target element to search for:5
Element 5 is present at index 4.

```

1 def binary_search (arr, target):
2     low,high=0, len(arr)-1
3
4     while low<=high:
5         mid = (low+high)//2
6         if arr [mid] == target:
7             return mid
8         elif arr[mid]<target:
9             low=mid+1
10        else:
11            high=mid-1
12
13    return -1
14
15 arr=input("Enter the sorted list of elements seperated by spaces:").split()
16 arr=[int(x) for x in arr]
17
18 target=int(input("Enter the target element to search for:"))
19
20 result=binary_search (arr, target)
21
22 if result !=-1:
23     print(f"Element {target} is present at index: {result}.")
24
25 else:
26     print(f"Element {target} is not present in array.")
27
28 #kiran
29
30 #23A91A0482

```

Enter the sorted list of elements seperated by spaces:2 3 4 5 6
Enter the target element to search for:4
Element 4 is present at index: 2.

