

```
binary_search.py X
binary_search.py > ...
1  def binary_search(arr, target):
2      left, right = 0, len(arr) - 1
3      while left <= right:
4          mid = (left + right) // 2
5          if arr[mid] == target:
6              return mid
7          elif arr[mid] < target:
8              left = mid + 1
9          else:
10             right = mid - 1
11     return -1
12
13     # Predefined sorted array
14     array = [10, 15, 23, 45, 70, 85]
15     print(array)
16     # Taking input from user
17     target = int(input("Enter the target element to search for: "))
18
19     # Performing binary search
20     result = binary_search(array, target)
21
22     # Displaying the result
23     if result != -1:
24         print(f"Element found at index: {result}")
25     else:
26         print("Element not found in the array.")
27
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

PS E:\5thsem\DAA\practicals> python binary_search.py
[10, 15, 23, 45, 70, 85]
Enter the target element to search for: 45
Element found at index: 3
PS E:\5thsem\DAA\practicals> | |
```