

VARSHINI S 2024-CSE ▾

V2

**Started on** Wednesday, 17 September 2025, 8:45 AM**State** Finished**Completed on** Friday, 3 October 2025, 12:12 PM**Time taken** 16 days 3 hours**Marks** 1.00/1.00**Grade** **10.00** out of 10.00 (**100%**)

**Question 1** | Correct Mark 1.00 out of 1.00**Problem Statement:**

Given a sorted array and a value x, the floor of x is the largest element in array smaller than or equal to x. Write divide and conquer algorithm to find floor of x.

**Input Format**

First Line Contains Integer n – Size of array

Next n lines Contains n numbers – Elements of an array

Last Line Contains Integer x – Value for x

**Output Format**

First Line Contains Integer – Floor value for x

**Answer:** (penalty regime: 0 %)

```

1 #include<stdio.h>
2 int main(){
3     int n,x;
4     scanf("%d",&n);
5     int arr[n];
6     for(int i=0;i<n;i++){
7         scanf("%d",&arr[i]);
8     }
9     scanf("%d",&x);
10    for(int i=n-1;i>=0;i--){
11        if(arr[i]<=x){
12            printf("%d",arr[i]);
13            break;
14        }
15    }
16 }
```

	Input	Expected	Got	
✓	6 1 2 8 10 12 19 5	2	2	✓

	Input	Expected	Got	
✓	5 10 22 85 108 129 100	85	85	✓
✓	7 3 5 7 9 11 13 15 10	9	9	✓

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[Back to Course](#)