

3-Finding Floor Value

Started on	Tuesday, 9 September 2025, 1:05 PM
State	Finished
Completed on	Tuesday, 9 September 2025, 1:12 PM
Time taken	7 mins 5 secs
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100%)

Question 1 | Correct Mark 1.00 out of 1.00 Flag question

**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;
4     scanf("%d",&n);
5     int m[n];
6     for(int i=0;i<n;i++){
7         scanf("%d",&m[i]);
8     }
9     int x;
10    scanf("%d",&x);
11
12    for(int i=0;i<n;i++){
13        for(int j=i+1;j<n;j++){
14            if(m[i]>m[j]){
15                int temp=m[i];
16                m[i]=m[j];
17                m[j]=temp;
18            }
19        }
20    }
21    int c=0;
22    for(int i=0;i<n;i++){
23        if(m[i]<=x){
24            c=m[i];
25        }
26    }
27    printf("%d",c);
28
29 }
```

	Input	Expected	Got	
✓	6	2	2	✓
	1			
	2			
	8			
	10			
	12			
	19			
	5			
✓	5	85	85	✓
	10			
	22			
	85			
	108			
	129			
	100			
✓	7	9	9	✓
	3			
	5			
	7			
	9			
	11			
	13			
	15			
	10			

Passed all tests! ✓

Correct Marks for this submission: 1.00/1.00.

Finish review

Back to Course