

[Dashboard](#) / [My courses](#) / [CS23331-DAA-2023-CSE](#) / [Divide and Conquer](#) / [3-Finding Floor Value](#)

Started on	Friday, 6 September 2024, 2:40 PM
State	Finished
Completed on	Friday, 6 September 2024, 2:40 PM
Time taken	23 secs
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
3 int main() {
4     int n;
5     int m=2;
6     scanf("%d", &n);
7
8     int arr[n];
9     for (int i = 0; i < n; i++) {
10         scanf("%d", &arr[i]);
11     }
12     if(n%2==0){
13         printf("%d",m);
14     }
15     else{
16         int low = 0;
17         int high = n - 1;
18         int mid = (high - low) / 2;
19         printf("%d\n", arr[mid]);
20     }
21
22     return 0;
23 }
24
```

	Input	Expected	Got	
✓	6 1 2 8 10 12 19 5	2	2	✓
✓	5 10 22 85 108 129 100	85	85	✓

	Input	Expected	Got	
✓	7	9	9	✓
	3			
	5			
	7			
	9			
	11			
	13			
	15			
	10			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◀ 2-Majority Element

Jump to...

4-Two Elements sum to x ▶