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Started on	Friday, 20 September 2024, 1:46 PM
State	Finished
Completed on	Friday, 20 September 2024, 1:53 PM
Time taken	7 mins 48 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  int main()
3  {
4      int n,x,temp=0;
5      scanf("%d",&n);
6      int arr[n];
7      for(int i=0;i<n;i++)
8      {
9          scanf("%d",&arr[i]);
10     }
11     scanf("%d",&x);
12     int t1,t2;
13     if(x<arr[n/2])
14     {
15         t1=0;
16         t2=n/2;
17     }
18     else
19     {
20         t1=n/2;
21         t2=n;
22     }
23     for (int i=t1;i<t2;i++)
24     {
25         if(x>arr[i])
26         {
27             temp=arr[i];
28         }
29     }
30     printf("%d",temp);
31 }

```

	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.

◀ 2-Majority Element

Jump to...

4-Two Elements sum to x ▶