Started on	Friday, 20 September 2024, 2:18 PM
State	Finished
Completed on	Friday, 20 September 2024, 2:23 PM
Time taken	4 mins 55 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 %)

```c
#include<stdio.h>
int find(int a[],int l,int h,int x){
    int m = (l+h)/2;
    if(a[m] > x){
        return find(a,0,m,x);
    }
    else if(a[m]==x){
        return a[m];
    }
    else{
        if(a[m+1] > x){
            return a[m];
        }
        else{
            return find(a,m+1,h,x);
        }
    }

}
int main(){
    int n,x;
    scanf("%d",&n);
    int a[n];
    for(int i=0;i<n;i++){
        scanf("%d",&a[i]);
    }
    scanf("%d",&x);
    int k=find(a,0,n-1,x);
    printf("%d",k);
    return 0;
}
```

	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 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 ►