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 %)

```
#include<stdio.h>
int Binarysearch(int arr[],int left,int right,int x)
{
    if(arr[left]==x)
    {
        return left;
    }
    while(left<=right)
    {
        int mid=(left+right)/2;
        if(arr[mid]<x && arr[mid+1]>=x)
        {
            return mid;
        }
        else if(arr[mid]>x)
        {
            right=mid-1;
            Binarysearch(arr,left,right,x);
        }
        else
        {
            left=mid+1;
            Binarysearch(arr,left,right,x);
        }

    }
    return 0;;

}
int main(){
    int n,x,a;
    scanf("%d",&n);
    int arr[n];
    for(int i=0;i<n;i++)
    {
        scanf("%d",&arr[i]);
    }
    int left=0,right=n-1;
    scanf("%d",&x);
    a=Binarysearch(arr,left,right,x);
    printf("%d",arr[a]);
}

```

	Input	Expected	Got	
✔	6 1 2 8 10 12 19 5	2	2	✔
✔	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 ►