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 main(){
    int n,x,fin;
    scanf("%d",&n);
    int arr[n];
    for(int i=0;i<n;i++)scanf("%d",&arr[i]);
    scanf("%d",&x);
    for(int j=0;j<n;j++)
    {
        int max=arr[j];
        if(arr[j+1]>max){
            max=arr[j+1];
            if(max<=x)fin=max;
        }
    }
    printf("%d",fin);

}
```

	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	9	9	✔