Started on	Monday, 22 September 2025, 3:58 PM
State	Finished
Completed on	Monday, 22 September 2025, 4:04 PM
Time taken	6 mins 35 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 of integers say arr[] and a number x. Write a recursive program using divide and conquer strategy to check if there exist two elements in the array whose sum = x. If there exist such two elements then return the numbers, otherwise print as “No”.

Note: Write a Divide and Conquer Solution

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 – Sum Value

Output Format

First Line Contains Integer – Element1

Second Line Contains Integer – Element2 (Element 1 and Elements 2 together sums to value “x”)

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
void sum_pair(int a[],int l,int h,int x){
    if(l>=h){
        printf("No");
        return;
    }
    int s=a[l]+a[h];
    if(s==x){
        printf("%d\n%d",a[l],a[h]);
    }
    else if(s<x)
        sum_pair(a,l+1,h,x);
    else
        sum_pair(a,l,h-1,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);
    sum_pair(a,0,n-1,x);
}
```

	Input	Expected	Got	
✔	4 2 4 8 10 14	4 10	4 10	✔
✔	5 2 4 6 8 10 100	No	No	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.