

**Started on** Monday, 22 September 2025, 3:58 PM

**State** Finished

**Completed on** Monday, 22 September 2025, 4:06 PM

**Time taken** 7 mins 30 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 %)

```

1 #include<stdio.h>
2 void sum(int a[],int l,int h,int x){
3     if(l>=h){
4         printf("No");
5         return;
6     }
7     int s=a[l]+a[h];
8     if(s==x){
9         printf("%d\n%d",a[l],a[h]);
10    }
11    else if(s<x)
12        sum(a,l+1,h,x);
13    else
14        sum(a,l,h-1,x);
15 }
16 int main()
17 {
18     int n,x;
19     scanf("%d",&n);
20     int a[n];
21     for(int i=0;i<n;i++){
22         scanf("%d",&a[i]);
23     }
24     scanf("%d",&x);
25     sum(a,0,n-1,x);
26 }
```

	Input	Expected	Got	
✓	4	4	4	✓
	2	10	10	
	4			
	8			
	10			
	14			

	Input	Expected	Got	
✓	5	No	No	✓
	2			
	4			
	6			
	8			
	10			
	100			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.