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Started on	Tuesday, 1 October 2024, 2:01 PM
State	Finished
Completed on	Tuesday, 1 October 2024, 2:58 PM
Time taken	56 mins 11 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  #include<stdbool.h>
3  bool Sum(int arr[],int left,int right,int x){
4      while(left<right){
5          int sum = arr[left]+arr[right];
6          if(sum==x)
7          {
8              printf("%d\n",arr[left]);
9              printf("%d\n",arr[right]);
10             return true;
11         }
12         else if(sum<x)
13         {
14             left++;
15         }
16         else{
17             right--;
18         }
19     }
20 }
21 return false;
22 }
23 }
24 int main()
25 {
26     int n,x;
27     scanf("%d",&n);
28     int arr[n];
29     for(int i=0;i<n;i++)
30     {
31         scanf("%d",&arr[i]);
32     }
33     scanf("%d",&x);
34     if(!Sum(arr,0,n-1,x))
35     {
36         printf("No");
37     }
38     return 0;
39 }
40

```

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

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

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

[◀ 3-Finding Floor Value](#)

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