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Started on	Friday, 20 September 2024, 1:51 PM
State	Finished
Completed on	Friday, 20 September 2024, 2:10 PM
Time taken	18 mins 55 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  int sum(int arr[],int left,int right,int x){
3      if(left<right){
4          if(arr[left]+arr[right]==x){
5              printf("%d\\n%d",arr[left],arr[right]);
6              return 1;
7          }
8          else if(arr[left]+arr[right]>x){
9              return sum(arr,left,right-1,x);
10         }
11         else if(arr[left]+arr[right]<x){
12             return sum(arr,left+1,right,x);
13         }
14     }
15     }
16     return 0;
17 }
18 int main(){
19     int n;
20     scanf("%d",&n);
21     int arr[n];
22     for(int i=0;i<n;i++){
23         scanf("%d",&arr[i]);
24     }
25     int x;
26     scanf("%d",&x);
27     if(!sum(arr,0,n-1,x)){
28         printf("No");
29     }
30 }
```

	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.

[◀ 3-Finding Floor Value](#)

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