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>
#include<stdlib.h>
int TwoElementsSum(int*arr,int left,int right,int*res,int x){
   if(left>= right){
       return 0;
   }
   int cur_sum = arr[left]+arr[right];
   if(cur_sum==x){
       res[0]=arr[left];
       res[1]=arr[right];
       return 1;
   }
   else if(cur_sum > x){
       return TwoElementsSum(arr,left,right-1,res,x);
   }
   else{
       return TwoElementsSum(arr,left+1,right,res,x);
   }
}
int main(){
    int n;
    scanf("%d",&n);
    int arr[n];
    for(int i=0;i<n;i++) scanf("%d",&arr[i]);
    int *res = calloc(2,sizeof(int));
    int x;
    scanf("%d",&x);
    int result =TwoElementsSum(arr,0,n-1,res,x);
    if(result==1){
        printf("%d\n%d",res[0],res[1]);
    }
    else{
        printf("No");
    }
    return 0;

}
```

	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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