<u>Dashboard</u> / <u>My courses</u> / <u>CS23331-DAA-2023-CSE</u> / <u>Divide and Conquer</u> / <u>4-Two Elements sum to x</u>

Started on	Tuesday, 1 October 2024, 2:40 PM
State	Finished
Completed on	Tuesday, 8 October 2024, 2:26 PM
Time taken	6 days 23 hours
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 %)

```
#include <stdio.h>
 2 void Sum(int arr[],int l,int r,int x) {
 3 🔻
        while (1 < r) {
 4
             int sum = arr[1] + arr[r];
             if (sum == x) {
 5 -
                 printf("%d\n", arr[l]);
 6
                 printf("%d\n", arr[r]);
 7
 8
                 return;
 9
10
             if (sum < x) {
11
                 1++;
12
             } else
13
                 r--;
14
15
            printf("No");
16
17
   int main()
18 ▼ {
19
        int n;
        scanf("%d", &n);
20
21
        int arr[n];
22
        for (int i = 0; i < n; i++) {
            scanf("%d", &arr[i]);
23
24
        }
25
        int x;
        scanf("%d", &x);
26
27
        Sum(arr, 0, n-1, x);
28
        return 0;
   }
29
```

	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			
	5 2 4 6 8 10	5 No 2 4 6 8	2 4 6 8 10

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

■ 3-Finding Floor Value

Jump to...

5-Implementation of Quick Sort ►