# <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	Thursday, 19 September 2024, 10:04 AM
State	Finished
Completed on	Thursday, 19 September 2024, 10:11 AM
Time taken	6 mins 42 secs
Marks	1.00/1.00
Grade	<b>10.00</b> out of 10.00 ( <b>100</b> %)

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

	Input	Expected	Got	
~	4	4	4	~
	2	10	10	
	4			
	8			
	10			
	14			
~	5	No	No	~
	2			
	4			
	6			
	8			
	10			
	100			

Passed all tests! ✓

Correct

Marks for this submission: 1.00/1.00.

◄ 3-Finding Floor Value

Jump to...

5-Implementation of Quick Sort ►