



CS23331-DAA-2024-CSE / 4-Two Elements sum to x



4-Two Elements sum to x

Started on	Friday, 3 October 2025, 2:10 PM
State	Finished
Completed on	Friday, 3 October 2025, 2:54 PM
Time taken	43 mins 46 secs
Marks	1.00/1.00
Grade	10.00 out of 10.00 (100%)

Question 1 | Correct Mark 1.00 out of 1.00 [Flag question](#)**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 findPair(int arr[],int left,int right,int x){
3     if(left>=right){
4         return 0;
5     }
6     int sum=arr[left]+arr[right];
7     if(sum==x){
8         printf("%d\n%d\n",arr[left],arr[right]);
9         return 1;
10    }
11    else if(sum<x){
12        return findPair(arr,left+1,right,x);
13    }else{
14        return findPair(arr,left,right-1,x);
15    }
16 }
17 int main(){
18     int n;
19     scanf("%d",&n);
20     int arr[n];
21     for(int i=0;i<n;i++){
22         scanf("%d",&arr[i]);
23     }
24     int x;
25     scanf("%d",&x);
26     if(!findPair(arr,0,n-1,x)){
27         printf("No\n");
28     }
29     return 0;
30 }
```

	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.

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