

[Dashboard](#) / [My courses](#) / [CS23331-DAA-2023-CSE](#) / [Divide and Conquer](#) / [4-Two Elements sum to x](#)

Started on	Tuesday, 8 October 2024, 1:46 PM
State	Finished
Completed on	Tuesday, 8 October 2024, 2:16 PM
Time taken	29 mins 37 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
3  int main() {
4      int n;
5      scanf("%d", &n);
6
7      if (n <= 0) {
8          printf("No\n");
9          return 0;
10     }
11
12     int arr[n];
13     for (int i = 0; i < n; i++) {
14         scanf("%d", &arr[i]);
15     }
16
17     int x;
18     scanf("%d", &x);
19     int flag = 1;
20     int num1 = 0, num2 = 0;
21     for (int i = 0; i < n; i++) {
22         for (int j = 0; j < n; j++) {
23             if (i != j && arr[i] + arr[j] == x) {
24                 num1 = arr[i];
25                 num2 = arr[j];
26                 flag = 0;
27                 break;
28             }
29         }
30         if (flag == 0) break;
31     }
32
33     if (flag == 0)
34         printf("%d\n%d\n", num1, num2);
35     else
36         printf("No\n");
37
38     return 0;
39 }
40

```

	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

Jump to...

5-Implementation of Quick Sort ▶