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>
int find_pair(int arr[], int left, int right, int x, int *num1, int *num2) {
    if (left >= right) {
        return 0;
    }

    int sum = arr[left] + arr[right];
    if (sum == x) {
        *num1 = arr[left];
        *num2 = arr[right];
        return 1;
    }

    else if (sum < x) {
        return find_pair(arr, left + 1, right, x, num1, num2);
    }
    else {
        return find_pair(arr, left, right - 1, x, num1, num2);
    }
}
int main() {
    int n, x;
    scanf("%d", &n);
    int arr[n];
    for (int i = 0; i < n; i++) {
        scanf("%d", &arr[i]);
    }
    scanf("%d", &x);
    int num1, num2;
    if (find_pair(arr, 0, n - 1, x, &num1, &num2)) {
        printf("%d\n%d\n", num1, num2);
    } else {
        printf("No\n");
    }

    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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5-Implementation of Quick Sort ►