4-Two Elements sum to x

Started on	Wednesday, 24 September 2025, 8:10 AM
State	Finished
Completed on	Wednesday, 24 September 2025, 8:39 AM
Time taken	28 mins 4 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 arr[100];
```

```c
int s,n;

int find_pair(int l, int r, int *a,int *b){
    if(l >= r){
        return 0;
    }
    int sum = arr[l]+arr[r];

    if(sum == s){
        *a = arr[l];
        *b = arr[r];
        return 1;
    }
    else if(sum > s){
        return find_pair(l,r-1,a,b);
    }
    else {
        return find_pair(l+1,r,a,b);
    }
}
int main(){

    scanf("%d", &n);

    for(int i=0;i<n;i++){
        scanf("%d", &arr[i]);
    }

    scanf("%d", &s);

    int a,b;
    if(find_pair(0,n-1, &a, &b)){
        printf("%d\n%d", a,b);
    }
    else{
        printf("No");
    }
    return 0;
}
```

	Input	Expected	Got	
✔	4 2 4 8 10 14	4 10	4 10	✔
✔	5 2	No	No	✔

	4			
	6			
	8			
	10			
	100			

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Finish review

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