Started on	Thursday, 18 September 2025, 9:25 AM
State	Finished
Completed on	Thursday, 18 September 2025, 9:29 AM
Time taken	3 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 %)

```
#include<stdio.h>
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 low=0;
    int high=n-1;
    while(low<high)
    {
        int currentsum=arr[low]+arr[high];
        if(currentsum==x)
        {
```

```
            printf("%d\n",arr[low]);
            printf("%d\n",arr[high]);
            return 0;
        }
        else if(currentsum<x)
        {
            low++;
        }
        else
        {
            high--;
        }
    }
    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.