CS23331-Design and Analysis of Algorithms-2023 Batch-CSE

Quiz navigation

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Finish review

Started on	Thursday, 19 September 2024, 6:53 PM
State	Finished
Completed on	Thursday, 19 September 2024, 6:58 PM
Time taken	4 mins 52 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 %)

```c
#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 count=0;
    for(int i=0;i<n;i++){
        for(int j=i+1;j<n;j++){
            if(arr[i]+arr[j]==x){
                printf("%d\n%d",arr[i],arr[j]);
                count++;
            }
        }
    }
    if(count==0){
        printf("No");
    }
}
```

	Input	Expected	Got	
✔	4 2 4 8 10 14	4 10	4 10	✔
✔	5 2 4 6 8 10 100	No	No	✔

Passed all tests! ✔

Correct

Marks for this submission: 1.00/1.00.

Finish review