REC-CIS

GE23131-Programming Using C-2024

Quiz navigation 2

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Status Finished Started Monday, 13 January 2025, 12:25 PM Completed Monday, 13 January 2025, 12:35 PM **Duration** 9 mins 58 secs

Question 1 Correct ▼ Flag question

Given an array of numbers, find the index of the smallest array element (the pivot), for which right are equal. The array may not be reordered.

Example

arr=[1,2,3,4,6]

- the sum of the first three elements, 1+2+3=6. The value of the last element is 6.
- Using zero based indexing, arr[3]=4 is the pivot between the two subarrays.
- The index of the pivot is 3.

Function Description

Complete the function balancedSum in the editor below.

balancedSum has the following parameter(s):

int arr[n]: an array of integers

Returns:

int: an integer representing the index of the pivot

Constraints

- $3 \le n \le 10^5$
- $1 \le arr[i] \le 2 \times 10^4$, where $0 \le i < n$
- It is guaranteed that a solution always exists.

Input Format for Custom Testing

Input from stdin will be processed as follows and passed to the function.

The first line contains an integer n, the size of the array arr.

Each of the next n lines contains an integer, arr[i], where $0 \le i < n$.

Sample Case 0

Sample Input 0

STDIN Function Parameters

 \rightarrow arr[] size n = 4

 \rightarrow arr = [1, 2, 3, 3]

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Sample Output 0

2

Explanation 0

- The sum of the first two elements, 1+2=3. The value of the last element is 3.
- Using zero based indexing, arr[2]=3 is the pivot between the two subarrays.
- The index of the pivot is 2.

Sample Case 1

Sample Input 1

STDIN Function Parameters

```
3 → arr[] size n = 3
1 → arr = [1, 2, 1]
2
```

Sample Output 1

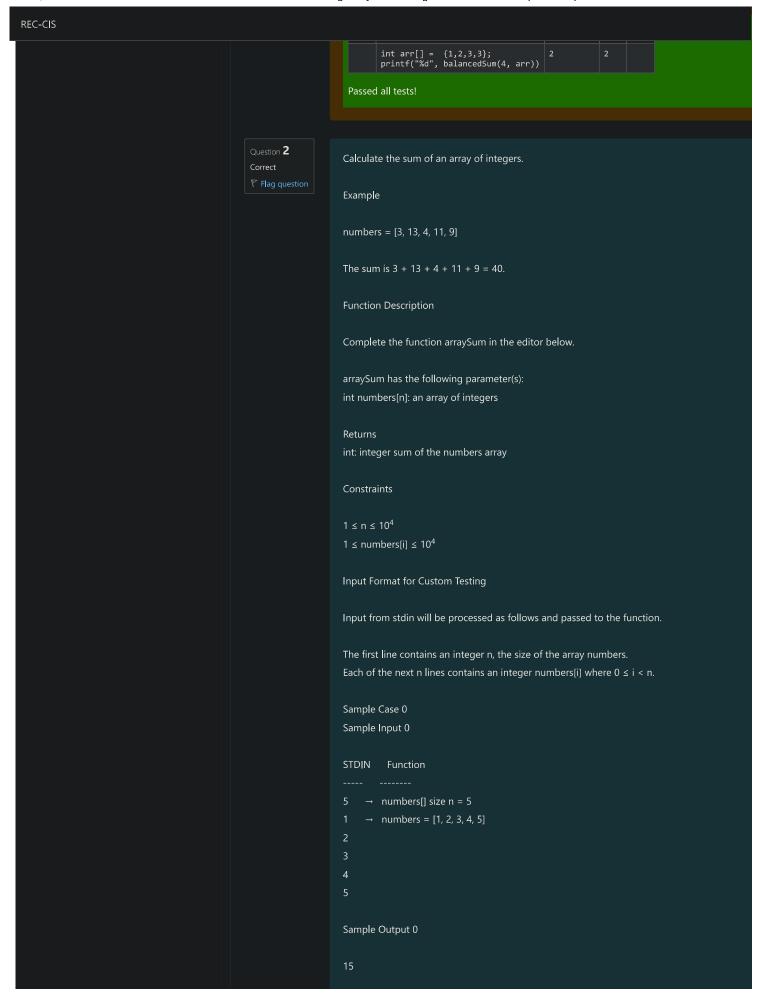
1

Explanation 1

- · The first and last elements are equal to 1.
- · Using zero based indexing, arr[1]=2 is the pivot between the two subarrays.
- The index of the pivot is 1.

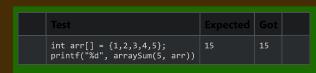
Answer: (penalty regime: 0 %)

Reset answer



REC-CIS

```
1 + 2 + 3 + 4 + 5 = 15.
Sample Case 1
Sample Input 1
STDIN Function
    \rightarrow numbers[] size n = 2
    \rightarrow numbers = [12, 12]
Sample Output 1
Explanation 1
12 + 12 = 24.
Answer: (penalty regime: 0 %)
 Reset answer
        * Complete the 'arraySum' function below.
        * The function is expected to return an INTEGER.
        * The function accepts INTEGER_ARRAY numbers as parameter.
       int arraySum(int numbers_count, int *numbers)
  10
           int sum=0;
            for(int i=0;i<numbers_count;i++){</pre>
                sum=sum+numbers[i];
           return sum;
```



Passed all tests!

Question **3**Correct

F Flag question

Given an array of n integers, rearrange them so that the sum of the absolute differences of all the sum of those absolute differences. Example n=5 arr =[1,3,3,2,4] If the list is rearrange are |1-2|=1, |2-3|=1, |3-3|=0, |3-4|=1. The sum of those differences is 1+1+0+1 minDiff in the editor below. minDiff has the following parameter: arr: an integer array Returns adjacent elements Constraints $2 \le n \le 105$ $0 \le arr[i] \le 109$, where $0 \le i < n$ Input Format For Cinteger, n, the size of arr. Each of the following n lines contains an integer that describes arr[i] For Custom Testing STDIN Function ----- $5 \to arr[]$ size n=5 $5 \to arr[] = [5, 1, 3, 7, 3]$

