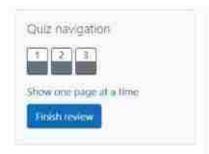
GE23131-Programming Using C-2024





```
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 numbers.
Each of the next in lines contains an integer numbers(i) where 0 \le i < n.
Sample Case 0.
Sample Input 0
STDIN: Function
   → numbers[] size n = 5

→ numbers = {1; 2, 3, 4, 5}

Sample Output ti
153
Explanation 0
1+2+3+4+5=15
Sample Case 1
Sample Input 1
STDIN Function
2 - numbers[] size n = 2
12 - numbers = [12, 12]
12
```

Content

F Flag question

Given an array of n integers, rearrange them so that the sum of the absolute differences of all adjacent elements is minimized. Then, compute the sum of those absolute differences. Example n = 5 arr + [1, 3, 3, 2, 4] if the list is rearranged as arr + [1, 2, 3, 3, 4], the absolute differences are [1 - 2] = 1, [2 - 3] = 1, [3 - 3] = 0, [3 - 4] = 1. The sum of those differences is 1 + 1 + 0 + 1 = 3. Function Description Complete the function minDiff in the editor below, minDiff has the following parameter; arr, an integer array Returns: int. the sum of the absolute differences of adjacent elements Constraints $2 \le n \le 105$ 0 s arr[i] ≤ 109 , where $0 \le i < n$ imput Format For Custom Testing The first line of input contains an integer, n, the size of air. Each of the following n lines contains an integer that describes n[i] (where $0 \le i < n$). Sample Case 0 Sample input For Custom Testing STDIN Function n = 5 + n[i] size n = 5.5 + n[i] n = 1.5 + 1.5

Answer: (penalty regime: 0.%)

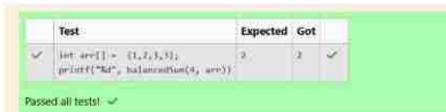
Reset answer

```
" Complete the 'middiff' function below.
2
3.
     * the function is expected to return an inflata.
     * The function accepts Differs ABBAY are as parameter-
6
    int minDiff(int arr count, int arr)
9
10
        for(int 1-0;1-arr count-1;1++)[
11
            for(int: j-0; j:arr count i-1; j++){
12
                if(arr[j])arr[j+1])(
                   int tomp - and il.
17
                    arr[j]-arr[j+1];
14
15
                    arr[jat]=temp:
16
17
18
19
        int sum o:
28
        for(int i-0;icarr_count-1;i+)(
            sum += abs(orr[i] acr[i+1]);
21
22
23
        return sum;
24
25
```

```
Test Expected Got

int are[] = (5, 1, 3, 7, 3), 8 8 4
printf("Na", mindiff(5, are))
```

Passed all tests! -



Correct

F Ray question

Calculate the sum of an array of integers.

Example

numbers = [3, 13, 4, 11, 9]

The sum is 3 + 13 + 4 + 11 + 9 = 40.

Function Description

Complete the function arraySum in the editor below.

arraySum has the following parameter(s): int numbers[n]: an array of integers

Returns

int: integer sum of the numbers array

Constraints

 $1 \le n \le 10^4$

 $1 \le numbers(i) \le 10^4$

STDIN Function Parameters -- arrij size n = 3 - art = [1, 2, 1] Sample Output 1 1 Explanation 1 The first and last elements are equal to 1. Using zero based indexing, an[1]=2 is the pivot between the two subarrays. The index of the pivot is 1.

Answer: (penalty regime: 0 %)

Reset answer

```
" complete the 'naluncednes' function below.
     * The function is expected to return an INTEGER.
     " The function accepts INTEGER ARRAY arr as parameter.
 6
    Int balancedSum(int arr_count, into arr)
 9 .
119
        imt left - 0, right - 0;
        for(int 1:0; i=arr_count;1++)[
115
            right --arr[i];
12
13
        for(int i 0;i arr_count;i++){
14 .
            if(left (right arr[i]))
15
            return i;
16
27
            laft - arr[1];
           right - arr[i];
18
19
        return 1;
20
21
```

```
Sample Output 1
24
Explanation 1
12 + 12 = 24.
Answer: (penalty regime: 0.%)
 Reset answer
       "Complete the tarransant function below.
   3
       * The function is expected to return an INTEGER.
   35. * The function accepts DOTEGER ARRAY numbers as parameters.
   4
   8
       int arraySum(int numbers count, int 'numbers)
  9
  10
          int sum o;
          for(int 1-0;1 < numbers_count;1-+){
  11 -
              sum + numbers[i];
  12
  13
  14
          return sue;
  15
  10
```

Passed all tests! ~

```
3 × n × 10°
    1 \le an(i) \le 2 \times 10^4, where 0 \le i \le n
     It is guaranteed that a solution always exists.
Input Formal 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 in lines contains an integer, arr[i], where 0 \le i \le n.
Sample Case 0-
Sample Input 0.
STERN Function Parameters
       -----
    - arr[] size n = 4
    - arr = [1, 2, 3, 3]
3
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 toput:1
```