Question 1 Given an array of numbers, find the index of the smallest array element (the pivot), for which the sums of all elements to the left and to the Correct right are equal. The array may not be reordered. ₹ Flag question Example arr=[1,2,3,4,6] \cdot 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 int: an integer representing the index of the pivot Constraints $\cdot \qquad 3 \le n \le 10^5$ $1 \le arr[i] \le 2 \times 10^4$, 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 4 → arr[] size n = 4 1 \rightarrow arr = [1, 2, 3, 3] 2 3 Sample Output 0 2

Explanation 0

The index of the pivot is 2.

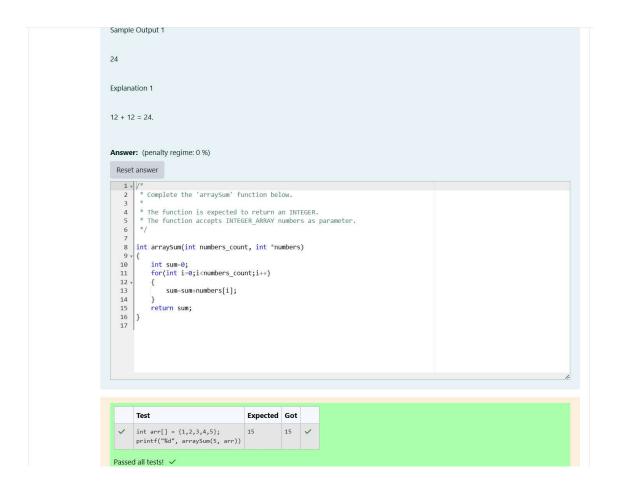
The sum of the first two elements, 1+2=3. The value of the last element is 3.

Using zero based indexing, arr[2]=3 is the pivot between the two subarrays.

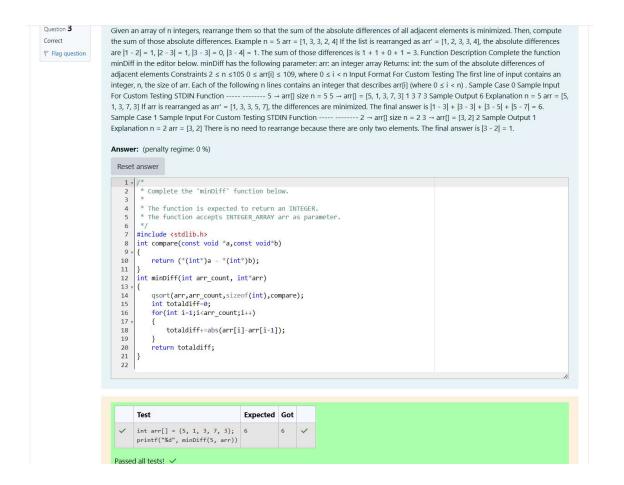
```
Sample Case 1
Sample Input 1
STDIN Function Parameters
3 → arr[] size n = 3
1 → arr = [1, 2, 1]
2
1
Sample Output 1
Explanation 1
· The first and last elements are equal to 1.
     Using zero based indexing, arr[1]=2 is the pivot between the two subarrays.
· The index of the pivot is 1.
Answer: (penalty regime: 0 %)
 Reset answer
 \begin{vmatrix} 1 \ 7 \end{vmatrix} / ^* = 2 Complete the 'balancedSum' function below.
         * The function is expected to return an INTEGER.
* The function accepts INTEGER_ARRAY arr as parameter.
*/
   int balancedSum(int arr_count, int* arr)

9 v {
             int totalsum=0;
for(int i=0;i<arr_count;i++)</pre>
   10
11
   12 · 13 · 14 · 15
                 totalsum+=arr[i];
           for(int i=0;i<arr_count;i++)
{</pre>
   16
17
                  int rightsum=totalsum-leftsum-arr[i];
if(leftsum==rightsum)
   18
19
              {
    return i;
   20 -
   22
23
                }
leftsum+=arr[i];
   24
25
26
27
                                                 Expected Got
  ✓ int arr[] = {1,2,3,3};
printf("%d", balancedSum(4, arr))
2 ✓
 Passed all tests! <
```

```
Question 2
                    Calculate the sum of an array of integers.
Flag question
                    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
                    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 n lines contains an integer numbers[i] where 0 \le i < n.
                    Sample Case 0
                    Sample Input 0
                   STDIN Function
                   5 → numbers[] size n = 5
                   1 \rightarrow numbers = [1, 2, 3, 4, 5]
                   2
                    3
                   4
                   5
                   Sample Output 0
                    15
                    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
```



P.DINESH KUMAR 240801069 ECE-B



P.DINESH KUMAR 240801069 ECE-B