

Day-48 of the #101 days of the coding challenge-----

Problem:-

Given an array of integers, calculate the ratios of its elements that are *positive*, *negative*, and *zero*.

Print the decimal value of each fraction on a new line with 6 places after the decimal.

Note: This challenge introduces precision problems. The test cases are scaled to six decimal places, though answers with absolute error of up to 10^{-6} are acceptable.

There are 6 elements, two positive, two negative and one zero. Their ratios are $\frac{2}{6}$, $\frac{2}{6}$, and $\frac{1}{6}$. Results are printed as:

TDIN	Function
-----	-----
6	arr[] size n = 6
-4 3 -9 0 4 1	arr = [-4, 3, -9, 0, 4, 1]

Sample Output

```
0.500000
0.333333
0.166667
```

Code:-

```
void plusMinus(vector<int> arr) {

    int i, posCount = 0, negCount = 0, zeroCount = 0;
    int length = arr.size(); // length of the array

    for(i = 0; i<length; i++){

        if(arr[i]>0)
            posCount++;
        if(arr[i]<0)
            negCount++;
        if(arr[i] == 0)
            zeroCount++;
    }

    double positiveRatio = static_cast<double>(posCount)/length;
    // type casting into double
    double negativeRatio = static_cast<double>(negCount)/length;
    double zeroRatio = static_cast<double>(zeroCount)/length;

    cout<<positiveRatio<<"\n"<<negativeRatio<<"\n"<<zeroRatio }
```

Output:-

Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

✓ Sample Test case 0

✓ Sample Test case 1

1	6
2	-4 3 -9 0 4 1

Your Output (stdout)

1	0.5
2	0.333333
3	0.166667

Expected Output

1	0.500000
2	0.333333
3	0.166667

Problem:-

Given five positive integers, find the minimum and maximum values that can be calculated by summing exactly four of the five integers. Then print the respective minimum and maximum values as a single line of two space-separated long integers

Sample Input

1 2 3 4 5

Sample Output

10 14

Code:-

```
void miniMaxSum(vector<int> arr) {  
  
    long long int minSum = LLONG_MAX; // Initialize minSum to the  
    maximum possible value  
    long long int maxSum = LLONG_MIN; // Initialize maxSum to the  
    minimum possible value  
    long long int totalSum = 0;  
  
    int length = arr.size();
```

```

for(int i = 0; i < length; i++) {
    totalSum += arr[i];
    minSum = min(minSum, static_cast<long long int>(arr[i]));
    maxSum = max(maxSum, static_cast<long long int>(arr[i]));
}

long long int minSumResult = totalSum - maxSum;
long long int maxSumResult = totalSum - minSum;

cout << minSumResult << " " << maxSumResult;
}

```

Output:-

The screenshot shows a code execution environment with a sidebar on the left and a main panel on the right. The sidebar contains a list of test cases, all of which are marked as successful with green checkmarks. The main panel displays the compiler message 'Success', the input '1 2 3 4 5', and the expected output '10 14'.

Test Case	Status
Test case 0	Success
Test case 1	Success
Test case 2	Success
Test case 3	Success
Test case 4	Success
Test case 5	Success
Test case 6	Success

Compiler Message: Success

Input (stdin): 1 2 3 4 5

Expected Output: 10 14