

# Problem G. Plus Minus

OS Linux

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  $10^{-4}$  are acceptable.

## Example

*arr* = [1, 1, 0, -1, -1]

There are  $n = 5$  elements, two positive, two negative and one zero. Their ratios are  $\frac{2}{5} = 0.400000$ ,  $\frac{2}{5} = 0.400000$  and  $\frac{1}{5} = 0.200000$ . Results are printed as:

```
0.400000
0.400000
0.200000
```

## Function Description

Complete the *plusMinus* function in the editor below.

*plusMinus* has the following parameter(s):

- *int arr[n]*: an array of integers

## Print

Print the ratios of positive, negative and zero values in the array. Each value should be printed on a separate line with **6** digits after the decimal. The function should not return a value.

## Input Format

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

The second line contains  $n$  space-separated integers that describe *arr[n]*.

## Constraints

$$0 < n \leq 100$$

$$-100 \leq arr[i] \leq 100$$

## Output Format

**Print** the following **3** lines, each to **6** decimals:

1. proportion of positive values
2. proportion of negative values
3. proportion of zeros

### Sample Input

STDIN	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
```

### Explanation

There are **3** positive numbers, **2** negative numbers, and **1** zero in the array.

The proportions of occurrence are positive:  $\frac{3}{6} = 0.500000$ , negative:  $\frac{2}{6} = 0.333333$  and zeros:  $\frac{1}{6} = 0.166667$ .