

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: $\frac{3}{6} = \mathbf{0.500000}$, negative: $\frac{2}{6} = \mathbf{0.333333}$ and zeros:

$\frac{1}{6} = \mathbf{0.166667}$.