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Plus Minus

by [vatsalchanana](#)

Problem

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Given an array of integers, calculate which fraction of its elements are *positive*, which fraction of its elements are *negative*, and which fraction of its elements are *zeroes*, respectively. Print the decimal value of each fraction on a new line.

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.

Input Format

The first line contains an integer, N , denoting the size of the array.

The second line contains N space-separated integers describing an array of numbers $(a_0, a_1, a_2, \dots, a_{n-1})$.

Output Format

You must print the following **3** lines:

1. A decimal representing of the fraction of *positive* numbers in the array.
2. A decimal representing of the fraction of *negative* numbers in the array.
3. A decimal representing of the fraction of *zeroes* in the array.

Sample Input

```
6
-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 respective fractions of positive numbers, negative numbers and zeroes are $\frac{3}{6} = 0.500000$, $\frac{2}{6} = 0.333333$ and $\frac{1}{6} = 0.166667$, respectively.



Submissions: 168640

Max Score: 10

Difficulty: Easy

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Python 2



```
1  #!/bin/python
2
3  import sys
4
5
6  n = int(raw_input().strip())
7  arr = map(int,raw_input().strip().split(' '))
8  pos = 0
9  neg = 0
10 zero = 0
11
12 for i in range(0,n):
13     if arr[i]>0:
14         pos+=1
15     if arr[i]<0:
16         neg+=1
17     if arr[i]==0:
18         zero+=1
19
20 pos1=(float(pos)/float(n))
21 neg1=(float(neg)/float(n))
22 zero1=(float(zero)/float(n))
23 print("%.6f" %pos1)
24 print("%.6f" %neg1)
25 print("%.6f" %zero1)
```

Line: 19 Col: 9

[Upload Code as File](#) ☐ **Test against custom input**[Run Code](#)[Submit Code](#)

Congrats, you solved this challenge!

✓ Test Case #0

✓ Test Case #3

✓ Test Case #6

✓ Test Case #9

✓ Test Case #1

✓ Test Case #4

✓ Test Case #7

✓ Test Case #10

✓ Test Case #2

✓ Test Case #5

✓ Test Case #8

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