

<https://course.acciojob.com/idle?question=81bb9cff-b3ec-48bc-b343-76acf3861410>

● EASY

● Max Score: 30 Points

Plus Minus

Given an array `arr` of `N` integers, Calculate the ratios of its elements that are positive, negative, and zero to the array size `N`.

Print the decimal value of each fraction in a new line up to 6 decimal places.

Input Format

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

The second line contains `N` space-separated integers representing the array `arr`.

Output Format

Print the 3 required ratios up to 6 decimal places.

Example 1

Input

```
6
-4 3 -9 -5 4 1
```

Output

```
0.500000
0.500000
0.000000
```

Explanation

There are 3 positive integers, 3 negative integers, and 0 zeroes in the array.

The ratio of occurrence is - Positive: 0.500000, Negative: 0.500000, and Zeroes: 0.000000

Example 2

Input

```
3
1 0 -1
```

Output

```
0.333333
0.333333
0.333333
```

Explanation

There is 1 positive integer, 1 negative integer, and 1 zero in the array.

The ratio of occurrence is - Positive: 0.333333, Negative: 0.333333, and Zeroes: 0.333333

Constraints

$1 \leq n \leq 10^6$

$-10^8 \leq \text{arr}[i] \leq 10^8$

Topic Tags

- **Math**

My code

// in java

```
import java.util.*;
```

```
import java.lang.*;
import java.io.*;

public class Main
{
    public static void main (String[] args) throws java.lang.Exception
    {
        //your code here
        Scanner s =new Scanner(System.in);
        int n=s.nextInt();
        double pgt=0.0;
        double ngd=0.0;
        double zero=0.0;
        for(int i=0;i<n;i++)
        {
            int a=s.nextInt();
            if(a>0)
                pgt+=1;
            else
                if(a<0)
                    ngd+=1;
                else zero+=1;
        }
        System.out.println(pgt/n);
        System.out.println(ngd/n);
        System.out.println(zero/n);

    }
}
```

}