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  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  are acceptable.

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

There are  elements, two positive, two negative and one zero. Their ratios are ,  and . Results are printed as:

0.400000

0.400000

0.200000

Program

size = int(input())

zeroCount = 0

positiveCount = 0

negativeCount = 0

arr = [int(x) for x in input().split(" ")]

for i in range(0,len(arr)):

    if arr[i] == 0:

        zeroCount = zeroCount+ 1

    elif arr[i] < 0:

        negativeCount = negativeCount + 1

    else:

        positiveCount = positiveCount + 1

print(positiveCount/size)

print(negativeCount/size)

print(zeroCount/size)