

Problem C: Data Average

One of the important research areas in Computer Science is Data Mining. The main task of Data Mining is using computers to make sense out of large amounts of available data, or “Big Data”, as it has been recently called. One of the simpler tasks in Data Mining is data summarization, where we want to present a summary view of data. One way of summarizing numerical data is to simply present its average.

In this task, you are to write a program for calculating averages of several data arrays. Each data array is given in one line, and it consists of a list of floating-point numbers (these numbers may contain a decimal point or not). For each input array, your program should calculate the average and print it on a separate line.

Input

Each input line starts with a positive integer n , denoting the number of elements in the array, followed by a list of n numbers separated by space characters. At the very end, there is a line containing just the number 0 and it denotes the end of input.

Output

For each line of input, except the last line containing 0, the program must produce one line of output containing the arithmetic average of the array. The average is calculated by dividing the sum of all numbers in the array with the number of them. Each average must be expressed with the exactly four decimal digits.

<i>Sample Input</i>	<i>Sample Output</i>
3 1 2 3	2.0000
2 4.5 6	5.2500
5 -3.4 7.1 8.2 9.3 2	4.6400
0	