

Problem B

Length of a Vector

Time limit: 1 second

Memory limit: 256 megabytes

Problem Description

Given an n -dimensional vectors $\vec{x} = (x_1, x_2, \dots, x_n)$. Write a program to compute the length of \vec{x} , i.e., $\|\vec{x}\| = \sqrt{\sum_{i=1}^n x_i^2}$.

Input Format

The input contains at most 500 test cases. Each case consists of two lines. The first line contains an integer n , and the second line consists of n integers x_1, \dots, x_n separated by blanks. You should compute the length of \vec{x} . You may assume that n is at least 1 and at most 10000, and x_1, \dots, x_n are in $[-100, 100]$. The input is terminated by end-of-file.

Output Format

For each case, output the answer in one line. You should round the answer to 3 decimal places.

Sample Input

```
1
1
9
1 1 1 1 1 1 1 1 1
```

Sample Output

```
1.000
3.000
```