

Problem ID: lottalaps

Lotta is training her endurance with interval training. For that she has picked a specific route (you do not know the length of) through the local park. This morning she ran the route again and again, each time with a different but constant speed which she tracked. Hoping to encourage her in her efforts, you want to create some fancy diagrams with the statistics. Therefore you calculate different values, e.g. Lotta's highest speed, the average speed per round, the total average speed over all rounds and so on. For some reason, you have some problems with calculating the total average speed, so you write a program to help you with that.



Did you know that ... ?



... the oldest marathon finisher comes from India and his name is Fauja Singh? At the Toronto Waterfront Marathon in Canada, the then 100-year-old finished the race in a time of 8 hours, 25 minutes and 16 seconds.

On the other side of the age spectrum, Budhia Singh became known as the youngest marathon runner in the world. He had finished 48 marathons by the time he turned five.

Input

The input consists of:

- One line with an integer n ($1 \leq n \leq 1\,000$), the number of times Lotta has run the route.
- One line with n integers v_1, \dots, v_n ($1 \leq v_i \leq 10^5$ for all i), the speeds in $\frac{km}{h}$ Lotta ran at.

Output

Output the total average speed over all rounds in $\frac{km}{h}$ Lotta ran at. Your answer should have an absolute or relative error of at most 10^{-6} .

Sample Input 1

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2
6 12
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Sample Output 1

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8
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Sample Input 2

```
3
1 983 2
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Sample Output 2

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1.9986445
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