Statistics

Statement

In this problem, you are given a list of N integers.

Your task is to compute the *sum* and *average* of the list of integers.

The average of the integers is given by the sum of the integers divided by the number of integers. As the average may not be an integer, you should print this value rounded to 2 decimal places.

Constraints

- $1 \leq N \leq 1000$
- Each integer can be positive, negative or 0 but will contain at most 10 digits.

Input

The input will contain two lines.

The first line will contain a single integer N, the number of integers in the next line.

The second line will contain N integers separated by spaces.

Output

The output should contain two lines.

The first line will contain the sum of the integers in the format `Sum: [sum]` where `[sum]` should be replaced by the sum.

The second will contain the average of the integers in the format `Average: [average]` where `[average]` should be replaced by the average value and rounded to 2 decimal places.

Examples

Sample Input	Expected Output
`3` `4 -2 0`	`Sum: 2` `Average: 0.67`

Notes

1. A skeleton file has been given to help you. You should not create a new file or rename the file provided. You should develop your program using this skeleton file.
2. You are free to define your own helper methods and classes (or remove existing ones) if it is suitable but you must put all the new classes, if any, in the same skeleton file provided.

Skeleton File

You are given the skeleton file `Statistics.java`. You should see the following contents when you open the file:

```
/**
 * Name          :
 * Matric. No    :
*/

import java.util.*;

public class Statistics {
    private void run() {
        // implement your "main" method here
    }

    public static void main(String args[]) {
        Statistics runner = new Statistics();
        runner.run();
    }
}
```