

Task 1 - Crooked Digits

The crooked digit of a given number **N** is calculated using the number's digits in a very weird and bendy algorithm. The algorithm takes the following steps:

1. Sums the digits of the number **N** and stores the result back in **N**.
2. If the obtained result is bigger than **9**, step **1.** is repeated, otherwise the algorithm finishes.

The last obtained value of **N** is the result, calculated by the algorithm.

Input

- The input data should be read from the console.
- The only line in the input contains a number **N**, which can be integer or real number (decimal fraction), positive or negative.
- The input data will always be valid and in the format described. There is no need to check it explicitly

Output

- The output data should be printed on the console.
- You must print the calculated crooked digit of the number **N** on the first and only line of the output.

Constraints

- The number **N** will have no more than 300 **digits** before and after the decimal point.
- The decimal separator will always be the "." symbol.

Examples

Input	Output	Input	Output	Input	Output
3	3	-7231	4	1020340567.89	9