

# 17 Magic sum

10 points

## Introduction

One day, while you are sitting in front of your computer, something incredible happens. The computer starts making some noise and in a blast of light everything goes blank. When you opened your eyes, you found yourself in a weird and magical world. The computer must have sent you to another planet in a different parallel universe.

Walking around, in a hurry to find a way to come back home, you found out a message in a poster saying: "Solve the sum of all digits of a given number to go home!". You stopped and told yourself - wait, to come back home, the only thing is to solve a simple sum? is all that takes! –

Unfortunately, in this world, the basic mathematical operations are quite different than the ones in your home world. Thus, you need to understand them in order to give the correct answer and come back home.

The magic sum operation requires you to review a sequence of digits and find the sum of all digits with the following properties:

- In order to consider a digit, it has to match the next digit in the sequence. The sequence is circular, so the digit after the last digit is the first digit in the sequence.
- If a digit is even, you must multiply it by its position in the list before sum it. In this case, the first digit is considered to have the position 1.
- If a digit is odd, just sum it.

For instance:

- 1122 : outputs 7 =  $1+6$  → because the first digit (1) matches the second digit and its odd, we sum its value. The third digit (2) matches the fourth one and because its even, we multiply it by its position (that is 3).
- 123 : outputs 0 → because none of the elements matches the next in the sequence.
- 565 : outputs 5 → because the the third digit (5) matches the first one and its odd.

Will you be able to solve the sum and come back home?

## Input

The input consists of several lines with given numbers

Each number consist in a sequence of digits. All digits are between 1 and 9.

## Output

The output must consist in several lines with the integers representing the magic sum of the input numbers.

## Example

### Input

1122  
123  
565  
1

### Output

7  
0  
5  
1

