

# ALGERIAN OLYMPIAD IN INFORMATICS & EUREKA NHSM CLUB

The first AOI College Cup December  $14^{th}$ , 2024

Task 1 - Count the Ones This task is worth 100 points

### Task 1 - Count the Ones

Time limit per test : 1 second Memory limit per test : 256 megabytes

You have a string S that consists of zeroes "0" and ones "1". Count the number of substrings (contiguous subsegments) that consist of only ones "1".

#### Example:

Let S="00110". Then "011" is a subsequence of S while "010" is not.

#### Input

One line that contains S which consists only of ones and zeroes.

#### Output

Output a single integer which is the number of substrings that consist only of ones.

Subtasks Your program will be tested against several test cases grouped in subtasks. In order to obtain the score of a subtask, your program needs to correctly solve all of its test cases

**Subtask 1 (14 pts) :** |S| = 1

**Subtask 2 (23 pts) :**  $1 \le |S| \le 100$ 

Subtask 3 (27 pts):  $1 \le |S| \le 10^5$  and S contains either only ones or only zeroes.

Subtask 4 (36 pts):  $1 \le |S| \le 10^5$  with no further constraints.

## **Examples**

Input	Output
101110	7

Explanation of test #1:

