

Samantha and Sam are playing a numbers game. Given a number as a string, no leading zeros, determine the sum of all integer values of substrings of the string. For example, if the string is **42**, the substrings are **4**, **2** and **42**. Their sum is **48**.

Given an integer as a string, sum all of its substrings cast as integers. As the number may become large, return the value modulo  $10^9 + 7$ .

### Function Description

Complete the *substrings* function in the editor below. It should return the sum of the integer values of all substrings in a string representation of a number, modulo  $10^9 + 7$ .

*substrings* has the following parameter(s):

- *n*: the string representation of an integer

### Input Format

A single line containing an integer as a string without leading zeros.

### Constraints

- $1 \leq n \leq 2 \times 10^5$

### Output Format

A single line which is sum of the substrings,  $T\%(10^9 + 7)$

### Sample Input 0

16

### Sample Output 0

23

### Explanation 0

The substring of number 16 are 16, 1 and 6 which sums to 23.

### Sample Input 1

123

### Sample Output 1

164

### Explanation 1

The sub-strings of 123 are 1, 2, 3, 12, 23, 123 which sums to 164.