

Sam and substrings



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 $10^9 + 7$.

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**.