

Problem A. Equal Digits

Input file: *standard input*
Output file: *standard output*
Time limit: 3 seconds
Memory limit: 256 mebibytes

There is a string s consisting of decimal digits.

You need to transform the string s into any **non-empty** string t in which all digits are different. To achieve the goal, you can choose and remove a set (possibly empty) of non-intersecting substrings such that the length of each substring is strictly greater than 1, and in each substring, the first digit is equal to the last one. Find the number of ways to choose such set.

Two sets are different if one of them has a substring that does not exist in the other. Substrings are different if their start or end positions differ.

Since the number of ways can be quite large, output it modulo $10^9 + 7$.

Input

The single line contains the string s ($1 \leq |s| \leq 10^5$) consisting of decimal digits.

Output

Output one integer: the answer to the problem.

Examples

standard input	standard output
880055553535	7
123	1