
Digit Mode

Input file: **standard input**
Output file: **standard output**
Time limit: 2 seconds
Memory limit: 256 megabytes

Let $m(x)$ be the *mode* of the digits in decimal representation of positive integer x . The mode is the largest value that occurs most frequently in the sequence. For example, $m(15532) = 5$, $m(25252) = 2$, $m(103000) = 0$, $m(364364) = 6$, $m(114514) = 1$, $m(889464) = 8$.

Given a positive integer n , DreamGrid would like to know the value of $(\sum_{x=1}^n m(x)) \bmod (10^9 + 7)$.

Input

There are multiple test cases. The first line of the input contains an integer T , indicating the number of test cases. For each test case:

The first line contains a positive integer n ($1 \leq n < 10^{50}$) without leading zeros.

It's guaranteed that the sum of $|n|$ of all test cases will not exceed 50, where $|n|$ indicates the number of digits of n in decimal representation.

Output

For each test case output one line containing one integer, indicating the value of $(\sum_{x=1}^n m(x)) \bmod (10^9 + 7)$.

Example

standard input	standard output
5	45
9	615
99	6570
999	597600
99999	5689830
999999	