

## Problem C. Counting Amusing Numbers

Input file:            can.in  
Output file:           can.out  
Time limit:            2 seconds  
Memory limit:         256 megabytes

Do you think that counting is easy? This is not the case when you don't fully understand objects that you are counting.

Let's call a  $2N$ -digit integer  $X$  (possibly with leading zeroes) *amusing* if two  $N$ -digit integers  $a$  and  $b$  (again, possibly with leading zeroes) exist such that  $a + b = 10^N$  and  $S_d(X) = S_d(a) + S_d(b)$  holds for every digit  $d$ , where  $S_d(P)$  ( $0 \leq d \leq 9$ ) is the number of occurrences of digit  $d$  in the decimal representation of  $P$ . For example, numbers 46 ( $4 + 6 = 10^1$ ), 9820 ( $98 + 02 = 10^2$ ) and 08362090 ( $6020 + 3980 = 10^4$ ) are amusing.

You are given a sequence of digits and question marks of an even length. Find the number of ways to replace question marks with digits to get an amusing number, modulo  $10^9 + 7$ .

### Input

The only line of the input file contains a non-empty sequence of digits and question marks. The length of the sequence is even and doesn't exceed  $10^5$ . The number of question marks doesn't exceed 1000.

### Output

Output the sought number of ways modulo  $10^9 + 7$ .

### Examples

can.in	can.out
2?4?	4
29?2?3	0
?820	2