Problem D: Digit Division

Time limit: 1 s
Memory limit: 512 MiB

We are given a sequence of n decimal digits. The sequence needs to be partitioned into one or more contiguous subsequences such that each subsequence, when interpreted as a decimal number, is divisible by a given integer m.

Find the number of different such partitions modulo $10^9 + 7$. When determining if two partitions are different, we only consider the locations of subsequence boundaries rather than the digits themselves, e.g. partitions 2|22 and 22|2 are considered different.

Input

The first line contains two integers n and m ($1 \leq n \leq 300\,000$, $1 \leq m \leq 1\,000\,000$) – the length of the sequence and the divisor respectively. The second line contains a string consisting of exactly n digits.

Output

Output a single integer – the number of different partitions modulo $10^9 + 7$.

Example

input	input
4 2 1246	4 7 2015
output	**output**
4	0