



HOME TOP CONTESTS GYM PROBLEMSET GROUPS RATING API HELP KOTLIN HEROES Z DASHA CALENDAR

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS STANDINGS CUSTOM INVOCATION

C. Periodic integer number

time limit per test: 1 second memory limit per test: 256 megabytes input: standard input output: standard output

Alice became interested in periods of integer numbers. We say positive X integer number is periodic with length L if there exists positive integer number P with L digits such that X can be written as $PPPP\dots P$. For example:

X=123123123 is periodic number with length L=3 and L=9

X=42424242 is periodic number with length L=2, L=4 and L=8

X=12345 is periodic number with length L=5

For given positive period length L and positive integer number A, Alice wants to find smallest integer number X strictly greater than A that is periodic with length L.

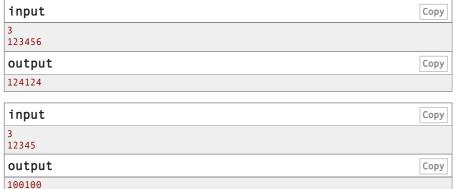
Input

First line contains one positive integer number L ($1 \le L \le 10^5$) representing length of the period. Second line contains one positive integer number A ($1 \le A \le 10^{100000}$).

Output

One positive integer number representing smallest positive number that is periodic with length L and is greater than A.

Examples



Note

In first example 124124 is the smallest number greater than 123456 that can be written with period L = 3 (P = 124).

In the second example 100100 is the smallest number greater than 12345 with period L = 3 (P=100) $\,$



→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Practice

You are registered for practice. You can solve problems unofficially. Results can be found in the contest status and in the bottom of standings.

→ Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest





→ Contest materials	
Announcement (en)	×
Statements (en)	×
Tutorial (en)	×

2019/9/18 Problem - C - Codeforces

Codeforces (c) Copyright 2010-2019 Mike Mirzayanov The only programming contests Web 2.0 platform Server time: Sep/18/2019 21:09:20^{UTC+8} (f1).

Desktop version, switch to mobile version.

Privacy Policy

Supported by



