A. Olesya and Rodion

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

Olesya loves numbers consisting of n digits, and Rodion only likes numbers that are divisible by t. Find some number that satisfies both of them.

Your task is: given the n and t print an integer strictly larger than zero consisting of n digits that is divisible by t. If such number doesn't exist, print -1.

Input

The single line contains two numbers, n and t ($1 \le n \le 100$, $2 \le t \le 10$) — the length of the number and the number it should be divisible by.

Output

Print one such positive number without leading zeroes, — the answer to the problem, or -1, if such number doesn't exist. If there are multiple possible answers, you are allowed to print any of them.

Examples

input
3 2
output
712

Codeforces Round #324 (Div. 2)
Finished

→ 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 ACM-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

→ Problem tags

math

No tag edit access

→ Contest materials

- Announcement
- Tutorial