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

Copy

3 2

output

Copy

712