Problem

You are given a positive integer n. The beauty factor of a number is the sum of digits obtained till the obtained sum is a single digit.

Example

- Beauty factor of 1987 = 1+9+8+7 = 25 = 2+5 = 7
- Beauty factor of 10 = 1+0 = 1

You are given a beauty factor, b. Your task is to find a minimum number (n) of length k whose beauty factor is b.

Here, the length of a number is defined as the number of digits a number has.

Note: The digits of the number in the output must be distinct and must be a positive integer

Input format

The first line contains the beauty factor b $(0 < b < 10)$ and the length of a number k $(0 < k < 10)$.

Output format

Print the minimum number of length k whose beauty factor is b. If no such number is possible to make the beauty factor b with length k, then print -1.

Sample Input	Sample Output
5 3	149

Time Limit: 1

Memory Limit: 256

Source Limit: