Mock CCC '20 Contest 1 J5 - A Prime Problem

Time limit: 0.5s **Memory limit:** 1G

koosaga likes numbers which are constructed by concatenating two prime numbers together. A number which can be formed by concatenating two primes that both have at least D digits is a D-level prime pair certificate. Leading zeroes are not permitted.

Given two integers D and N, compute the smallest D-level prime pair certificate greater than or equal to N.

Constraints

The output will never exceed $2 \cdot 10^9$.

There are no subtasks for this problem.

Input Specification

The input will consist of two positive space separated integers, D and N.

Output Specification

Output the smallest D-level prime pair certificate greater than or equal to N.

Sample Input

2 11328

Sample Output

11329