

A number for which any two consecutive digits differ in absolute value by at most 1 is called a stepping number.

Find the K-th stepping number greater than a given integer N.

Input Format

The first line contains two integers K and N.

Constraints

- $1 \leq K \leq 10^{18}$
- $1 \leq N \leq 10^{18}$
- The result fits on a signed 64 bit integer.

Output Format

Print a single integer representing the answer.