

Problem J. Wrong Subtraction

Time limit 1000 ms

Mem limit 262144 kB

Little girl Tanya is learning how to decrease a number by one, but she does it wrong with a number consisting of two or more digits. Tanya subtracts one from a number by the following algorithm:

- if the last digit of the number is non-zero, she decreases the number by one;
- if the last digit of the number is zero, she divides the number by 10 (i.e. removes the last digit).

You are given an integer number n . Tanya will subtract one from it k times. Your task is to print the result after all k subtractions.

It is guaranteed that the result will be positive integer number.

Input

The first line of the input contains two integer numbers n and k ($2 \leq n \leq 10^9$, $1 \leq k \leq 50$) — the number from which Tanya will subtract and the number of subtractions correspondingly.

Output

Print one integer number — the result of the decreasing n by one k times.

It is guaranteed that the result will be positive integer number.

Examples

Input	Output
512 4	50

Input	Output
1000000000 9	1

Note

The first example corresponds to the following sequence: $512 \rightarrow 511 \rightarrow 510 \rightarrow 51 \rightarrow 50$.