

A. Wrong Subtraction

time limit per test

1 second

memory limit per test

256 megabytes

input

standard input

output

standard output

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

Copy

512 4

output

Copy

50

input

Copy

1000000000 9

output

Copy

1

Note

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