



HOME TOP CONTESTS GYM PROBLEMSET GROUPS RATING API CALENDAR HELP 10 YEARS! 🏗

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

B. The number on the board

time limit per test: 2 seconds memory limit per test: 256 megabytes input: standard input output: standard output

Some natural number was written on the board. Its sum of digits was not less than k. But you were distracted a bit, and someone changed this number to n, replacing some digits with others. It's known that the length of the number didn't change.

You have to find the minimum number of digits in which these two numbers can differ.

Input

The first line contains integer k ($1 \le k \le 10^9$).

The second line contains integer n ($1 \le n \le 10^{100000}$).

There are no leading zeros in n. It's guaranteed that this situation is possible.

Output

Print the minimum number of digits in which the initial number and n can differ.

Examples

input	Сору
3 11	
output	Сору
1	

input	Сору
3 99	
output	Сору
0	

Note

In the first example, the initial number could be 12.

In the second example the sum of the digits of n is not less than k. The initial number could be equal to n.

Codeforces Round #427 (Div. 2)

Finished

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Problem tags

greedy	*1100	No tag edit access

→ Contest materials

- Announcement
- Tutorial

Codeforces (c) Copyright 2010-2020 Mike Mirzayanov
The only programming contests Web 2.0 platform
Server time: May/18/2020 15:30:10^{UTC-4} (g2).
Desktop version, switch to mobile version.

Privacy Policy

Supported by



