



HOME TOP CATALOG CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS HACKS STANDINGS CUSTOM INVOCATION

C. Really Big Numbers

time limit per test: 1 second memory limit per test: 256 megabytes

Ivan likes to learn different things about numbers, but he is especially interested in *really big* numbers. Ivan thinks that a positive integer number x is *really big* if the difference between x and the sum of its digits (in decimal representation) is not less than s. To prove that these numbers may have different special properties, he wants to know how rare (or not rare) they are — in fact, he needs to calculate the quantity of *really big* numbers that are not greater than n.

Ivan tried to do the calculations himself, but soon realized that it's too difficult for him. So he asked you to help him in calculations.

Input

The first (and the only) line contains two integers n and s ($1 \le n, s \le 10^{18}$).

Output

Print one integer — the quantity of *really big* numbers that are not greater than n.

Examples



input	Сору
25 20	
output	Сору
0	

input	Сору
10 9	
output	Сору
1	

Note

In the first example numbers 10, 11 and 12 are really big.

In the second example there are no *really big* numbers that are not greater than 25 (in fact, the first *really big* number is $30 \cdot 30 - 3 \ge 20$).

In the third example 10 is the only *really big* number $(10 - 1 \ge 9)$.

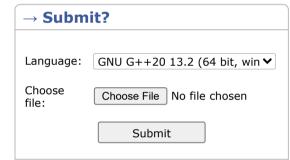
Finished Practice

______ → Virtual participation

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Start virtual contest





→ Last submissions		
Submission	Time	Verdict
262443203	May/25/2024 02:16	Accepted





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