

Problem C

Cudak

Problem ID: cudak
CPU Time limit: 1 second
Memory limit: 1024 MB

Source: Croatian Open Competition in Informatics 2007/2008, contest #3

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Božo is a strange little boy. Every day he tires his friends with strange questions. Today's question is: how many integers in the interval $[A, B]$ are there such that the sum of their digits is S , and which is the smallest such number?

Write a program that answers Božo's question so that he can get some sleep.

Input

The input contains three integers A , B and S ($1 \leq A \leq B < 10^{15}$, $1 \leq S \leq 135$).

Output

The first line should contain the number of integers in the interval with the digit sum equal to S .

The second line should contain the smallest such integer.

The input data will guarantee that the first number is at least 1.

Sample Input 1

1 9 5

Sample Output 1

1
5

Sample Input 2

1 100 10

Sample Output 2

9
19

Sample Input 3

11111 99999 24

Sample Output 3

5445
11499