

# CUDAK

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.

## Example

**Input:**

1 9 5

**Output:**

1

5

**Input:**

1 100 10

**Output:**

9

19

**Input:**

11111 99999 24

**Output:**

5445

11499