

∞ DIGITSUM ∞

Given two integers A and B , count how many integers between A and B (including A and B) have the sum of their digits equal to K .

For example, if $K = 5$, $A = 23$, and $B = 110$, then there are 5 such integers: 23, 32, 41, 50, and 104.

Input

The first line contains an integer A . The second line contains an integer B . The third line contains an integer K . ($1 \leq A < B \leq 1,000,000$, $1 \leq K \leq 200$).

Output

Output the number of integers between A and B (including A and B) whose sum of digits equals K .

Example

Input	Output
23 110 5	5
10 1000 10	63
100 1000000 1	1