F - Sum of Digits (easy version)

Description

The only difference between easy and hard versions is constraints of k.

We define $s(x)$ as the sum of digits of x in decimalism.

Given four integers d, k, L, R, your task is to calculate the number of k-dimension vector a , which satisfies $L \leq a_i \leq R, \sum_{i=1}^{k} s(a_i) \equiv s(\sum_{i=1}^{k} a_i) \pmod{d}$.

Input

The input contains four integers each in one line d, k, L, R $(1 \leq L \leq R \leq 10^{18}, k = 2, 1 \leq d \leq 9)$ in four lines.

Output

Output one integers in one line --- the number of k-dimension vector a module $10^9 + 7$.

Sample Input

6
2
10
12

Sample Output

9