Project Euler #104: Pandigital Fibonacci ends



Problem Statement

This problem is a programming version of Problem 104 from projecteuler.net

The Generalized Fibonacci sequence is defined by the recurrence relation:

$$G_n = G_{n-1} + G_{n-2}$$
, where $G_1 = a$ and $G_2 = b$.

It turns out that F_{541} , which contains 113 digits, is the first Fibonacci number for which the last nine digits are 1-9 pandigital (contain all the digits 1 to 9, but not necessarily in order). And F_{2749} , which contains 575 digits, is the first Fibonacci number for which the first nine digits are 1-9 pandigital.

Given that G_n is the first Generalized Fibonacci number for which the first k digits AND the last k digits are 1-k pandigital, find n.

NOTE For this problem if you don't find a solution with in $n \leq 2 imes 10^6$, print no solution.

Input Format

First line of input contains a, second line contains b and the third line contains k.

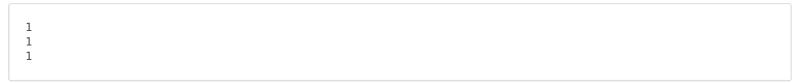
Constraints

$$1 \le a \le b \le 9$$
$$1 < k < 9$$

Output Format

Print the value n where G_n is the required generalized fibonacci term.

Sample Input#00



Sample Output#00

1

Sample Input#01

1 1 2

Sample Output#01

8