

Project Euler #51: Prime digit replacements



This problem is a programming version of [Problem 51](#) from [projecteuler.net](#). We highly recommend to solve original first

By replacing the 1st digit of *3, it turns out that six of the nine possible values: 13, 23, 43, 53, 73, and 83, are all prime.

By replacing the 3rd and 4th digits of 56 * *3 with the same digit, this 5 – *digit* number is the first example having seven primes among the ten generated numbers, yielding the family: 56003, 56113, 56333, 56443, 56663, 56773, and 56993. Consequently 56003, being the first member of this family, is the smallest prime with this property.

Find the smallest N – *digit* prime which, by replacing K – *digits* of the number (not necessarily adjacent digits) with the same digit, is part of an L prime value family.

Note1: It is guaranteed that solution does exist.

Note2: Leading zeros should not be considered.

Input Format

Input contains three integers N , K and L .

Output Format

Print the first L numbers of the prime value family found in increasing order.

Constraints

$$2 \leq N \leq 7$$

$$1 \leq K \leq N$$

$$1 \leq L \leq 8$$

Sample Input#00

5 2 7

Sample Output#00

56003 56113 56333 56443 56663 56773 56993

Sample Input#01

2 1 3

Sample Output#01

11 13 17