Program 1:
Write a program to find out the nth positive integer whose sum of digits is x (where $10 \leq x \leq 20$). Take input from STDIN and display output to STDOUT without any additional text.

Example:
Input:
n=5 x=12
Output:
75
Explanation: 39 48 57 66 75

Program 2:
Write a program to find all the numbers within a specific range which contain the given digit d. Take input from STDIN and display output to STDOUT without any additional text.

Example:
Input:
n1=5 n2=50 d=5
Output:
5 15 25 35 45 50

Program 3:
Write a program to check for a given integer, every digit and its neighbor digit differs by 1. Take input from STDIN and display output "Yes" or "No" to STDOUT.

Examples:
Input:
7878
Output:
Yes

Input:
4554
Output:
No

Program 4:
Given a number N which may be 10^5 digits long, the task is to count all the digits in N which divide N. Divisibility by 0 is not allowed. If any digit in N which is repeated divides N, then all repetitions of that digit should be counted i.e., N = 122324, here 2 divides N and it appears 3 times. So count for digit 2 will be 3. Take input from STDIN and display output to STDOUT without any additional text.

Examples:
Input:
122324
Output:
5

Program 5:
Given two positive numbers x and y, check if y is a power of x or not. Take input from STDIN and

display output “Yes” or “No” to STDOUT.

Example:
Input:
x=20, y=1
Output:
Yes

Input:
x=4, y=64
Output:
Yes

Input:
x=5, y=624
Output:
No