

Problem C

Beauty Prime Numbers

Time Limit: 1 seconds
Memory Limit: 256 Megabytes

Problem description

The significance of prime numbers, in both everyday applications & as a subtopic pertinent to all branches of math, cannot be overstated. We quietly rely on their special properties to carry the backbone of countless parts of our society — all because they are an irreducible part of the very fabric of nature. Resistant to any further factorization, prime numbers are often referred to as the “atoms” of the applied information technology.



You are the talented programmer, and be asked to write a program to count all beauty prime numbers. A beautiful prime number is defined as a number which sum of all digits in it modulo 10 equals to zero (0).

Input

The input consists two integer numbers (m, n). The first number (m) is the start number which we start to find out these beauty prime numbers. The second number (n) is the amount of prime numbers start from first number, in which we want to find out these beauty prime numbers.

$$0 < m, n \leq 10000$$

Output

For each test case in the input, print out the number of beauty prime numbers which program find out. In case of don't have any beauty prime number, print out zero value (0).

Example 1:

Input
8 5
Output
1

Explanation: start from 8, we find out 5 prime numbers: 11, 13, 17, 19, 23. And only one number 19 has $(1+9) \bmod 10 = 0$, so output is 1.

Example 2:

Input
101 10
Output
2

Explanation: start from 101, we find out 10 prime numbers: 101 103 107 109 113 127 131 137 139 149. And there are two numbers 109 ($1+0+9$) and 127 ($1+2+7$) have $\text{mod } 10 = 0$, so output is 2