

Beautiful Days at the Movies



Lily likes to play games with integers and their *reversals*. For some integer x , we define $reversed(x)$ to be the reversal of all digits in x . For example, $reversed(123) = 321$, $reversed(21) = 12$, and $reversed(120) = 21$.

Logan wants to go to the movies with Lily on some day x satisfying $i \leq x \leq j$, but he knows she only goes to the movies on days she considers to be *beautiful*. Lily considers a day to be *beautiful* if the absolute value of the difference between x and $reversed(x)$ is evenly divisible by k .

Given i , j , and k , count and print the number of *beautiful* days when Logan and Lily can go to the movies.

Input Format

A single line of three space-separated integers describing the respective values of i , j , and k .

Constraints

- $1 \leq i \leq j \leq 2 \times 10^6$
- $1 \leq k \leq 2 \times 10^9$

Output Format

Print the number of *beautiful* days in the inclusive range between i and j .

Sample Input

```
20 23 6
```

Sample Output

```
2
```

Explanation

Logan wants to go to the movies on days **20**, **21**, **22**, and **23**. We perform the following calculations to determine which days are *beautiful*:

- Day **20** is *beautiful* because the following evaluates to a whole number: $\frac{|20-02|}{6} = 3$
- Day **21** is *not beautiful* because the following doesn't evaluate to a whole number: $\frac{|21-12|}{6} = 1.5$
- Day **22** is *beautiful* because the following evaluates to a whole number: $\frac{|22-22|}{6} = 0$
- Day **23** is *not beautiful* because the following doesn't evaluate to a whole number: $\frac{|23-32|}{6} = 1.5$

Only two days, **20** and **22**, in this interval are beautiful. Thus, we print **2** as our answer.