

# TLE '17 Contest 8 P3 - Curious Numbers

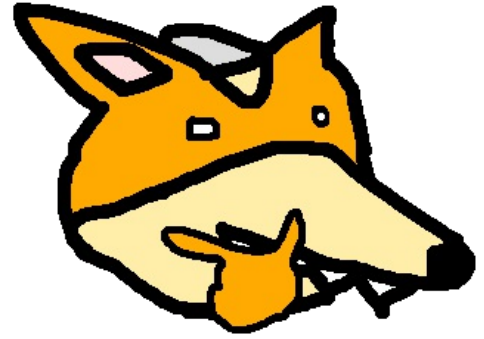
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Fax McClad, Croneria's most curious bounty hunter, is interested certain numbers.

A number is called a **palindrome** if it is the same when read left-to-right or right-to-left. For example, 12321 is a palindrome, and 1234 is not. Leading zeroes are not part of a palindrome. For example, 3130 is not a palindrome.

Fax also loves the number  $K$  and any multiple of it.

Fax is interested in the palindromes that are divisible by  $K$  between  $M$  and  $N$ , inclusive. He will do this  $Q$  times. Can you tell him how many of these numbers there are?



*Fax McClad is a deep thinker.*

## Input Specification

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The first line of input will contain  $Q$  ( $1 \leq Q \leq 10^5$ ) and  $K$  ( $1 \leq K \leq 10^{10}$ ).

The  $Q$  lines of input follow. Each line will contain  $M$  and  $N$  ( $1 \leq M \leq N \leq 10^{10}$ ).

For 20% of the points,  $N, M, K, Q \leq 10^3$ .

For an additional 30% of the points,  $N, M, K \leq 10^6$ ,  $Q \leq 10^3$ .

## Output Specification

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On separate lines, print the answer to each query.

## Sample Input

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2 2
10 50
100 300
```

## Sample Output

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```
2
10
```

## Explanation for Sample Output

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For the first query, 11, 22, 33, 44 are the only palindromes in between 10 and 50. Only 22 and 44 are divisible by 2.