

Weirdland

Time Limit: 1.0s **Memory Limit:** 256M

Şehmettin is the oddest person in the Weirdland who is currently living in the house **X**. Being the unique person he is, he wants to live in a house with a house number that is divisible by **Y**. But every day Şehmettin can either increase or decrease his house number by 1 according to the laws of Weirdland. Find the least number of days needed for Şehmettin to reach his goal.

Input

The only line contains **2** positive integers:

- $1 \leq X \leq 10^9$ (his house number)
- $1 \leq Y \leq 1000$ (number divisor)

Output

Print the minimum number of days needed.

Example

Input:

```
8 5
```

Output:

```
2
```

Explanation

Şehmettin's house number is 8. The closest multiple of 5 is 10. On the 1st day, Şehmettin's house number goes up to 9. On the 2nd day, Şehmettin's house number goes up to 10. It takes 2 days in total to reach 10.