Problem A
Integer Division
Time limit: 1 second

Write a program to perform division of two integers, x divided by y. The value of y is less than the magic number

$$922337203685477579 = 2^{63}/10 - 1.$$

The value of x can be very large, but less then 1000 decimal digits.

Input Format

The input file may contain many positive integers, two integers y and x per line. The divisor y comes before the dividend x in the input line. The input data y and x are both decimal numbers, and they are separated by exactly 1 space in the input line. The value of y is less then 2^{60}. The value of x is at most 1000 decimal digits.

The last line of the input file contains a "0". It indicates the end of the test data.

Output Format

For each pair of integers x and y in the input file compute the quotient q and remainder r for x divided by y, so that $y = qx + r$, $0 \le r < y$. If y divides x evenly ($r = 0$), then print the quotient q. Otherwise, print the quotient q followed by the remainder r, with a space between them. Leading zeros in every output positive integer should not be printed.

Sample Input

```
8 9
12 625
0
```

Output for the Sample Input

```
1 1
3 2
```