# **D. Reduced Fraction**

Time Limit: 3 seconds

## **Problem description**

You are required to reduce a fraction.

A reduced fraction (or fraction in lowest terms, simplest form or irreducible fraction) is a fraction in which the numerator and denominator are integers that have no other common divisors than 1 (and -1, when negative numbers are considered). In addition, a reduced fraction never has a negative denominator. Examples:

$$\frac{2}{4} = \frac{1}{2}$$

$$\frac{3}{-9} = \frac{1}{-3} = \frac{-1}{3}$$

User uses standard input stream (stdin) to enter the numerator and denominator of a fraction, the system needs to display the numerator and denominator of a reduced fraction. Note that, if the denominator is 1, no need to display it.

### **Input:**

numerator n is an integer number (-100  $\leq$  n  $\leq$  100)

denominator d is an integer number (-100 <= d <= 100)

## **Output:**

The reduced fraction with numerator and denominator separated by a space

#### Example 1:

Input	Output
2 4	1 2

### Example 2:

Input	Output
3 -9	-1 3

# Example 3:

Input	Output
62	3

# Example 4:

Input	Output
-15 -20	3 4

# Example 5:

Input	Output
12 9	4 3