

Program Name: fraction.cpp

Input File: fraction.dat

Reduce a given fraction to its simplest form. In this form, the numerator and the denominator are both integers and are relatively prime.

Input Description

Input to this problem will consist of a (non-empty) series of up to 100 data sets. Each data set will be formatted according to the following description, and there will be **no blank lines** separating data sets.

A single data set consists of a single line, " $N D$ ", where:

N : ($1 \leq N \leq 10000$) is an integer numerator.

D : ($1 \leq D \leq 10000$) is an integer denominator.

Output Description

For each data set, there will be exactly one line of output. The output line will express the reduced version of the input fraction using precisely the same formatting as the input, " $n d$ ".

Sample Input

```
100 1
1 100
100 100
75 20
```

Sample Output

```
100 1
1 100
1 1
15 4
```