# **Fractions Decomposition**

Write a program to decompose a given rational number into a sum of pairwise distinct fractions:  $1/n_1 + 1/n_2 + ... + 1/n_k$ , where  $n_i$  are positive integers.

## Input

Test cases (no more than 10 000) are given in the form

рq

where *p* and *q* are positive integers such that  $1 \le p \le q \le 1000$  (*p* and *q* are separated by a single space character). After each test case, a new line character follows.

## Output

For each pair *p* and *q*, decompose p/q into the sum:  $1/n_1 + 1/n_2 + ... + 1/n_k$ . As the result, please print only the denominators sorted from the smallest to the largest, separated by spaces. A newline character should follow the solution to each test-case.

## Example 1

#### Input:

### Output:

## Example 2

A larger test-case: input, and corresponding output.

## Scoring

By solving this problem you score 10 points.