## Fractions Decomposition

Write a program to decompose a given rational number into a sum of pairwise distinct fractions: $1 / n_{1}+1 / n_{2}+\ldots+1 / n_{\mathrm{k}}$, where $n_{\mathrm{i}}$ are positive integers.

## Input

Test cases (no more than 10000 ) are given in the form

$$
p q
$$

where $p$ and $q$ are positive integers such that $1<=p<=q<=1000$ ( $p$ 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: $1 / n_{1}+1 / n_{2}+\ldots+1 / n_{k}$. 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:

23
34
25
37

## Output:

26
24
315
311231

## Example 2

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

## Scoring

By solving this problem you score 10 points.

