## PLAY WITH MATH

You would have been fed up with competitive programming questions so far, now it is time to solve little math.

Assume you have a equation $A$ * $x-B^{*} y=0$
For a given value of $\mathbf{A}$ and $\mathbf{B}$, find the minimum positive integer value of $\mathbf{x}$ and $\mathbf{y}$ that satisfies this equation.

## Input

First line contains $\mathbf{T}$, number of test cases $0<=\mathbf{T}<=1000$ followed by $\mathbf{T}$ lines.
First line of each test case contains two space separated integers $\mathbf{A}$ and $\mathbf{B} .1<=\mathbf{A}, \mathbf{B}<=1000$ 000000.

## Output

For each test case, output a single line containing two integers $\mathbf{x}$ and $\mathbf{y}$ (separated by a single space).

## Example

Input:
1
23

Output:
32
Note:

- Brute force won't pass the given constraint.
- Negative number cases are avoided to make the problem easy.

