Greatest common divisor

For given integers **a** and **b** print the greatest common divisor of a and b.

Input

The first line of the standard input contains one integer **t** (t<10001) which is the number of test cases.

In each of the next **t** lines there are two numbers: **a** and **b**.

Output

For each test, print the greatest common divisor of a and b.

Example

Input:
3
5 5
7 5
128 164
Output:
5
1
4