
GCD

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

Given two numbers A and B . Print the **greatest common divisor** between (A, B) .

Note: The greatest common divisor (**GCD**) of two or more integers, which are not all zeroes, **is the largest positive integer that divides each of the integers.**

For example:

the **GCD** of **8** and **12** is **4**.

because the numbers that divides both **8** and **12** are **(1,2,4)** and **4** is the largest one .

Input

Only one line containing two numbers A and B ($1 \leq A, B \leq 10^3$).

Output

Print the **GCD** of A and B .

Examples

standard input	standard output
12 8	4
3 7	1
3 7	1
5 10	5

Note

What is the greatest common divisor of **54 and 24**?

*The number 54 can be expressed as a product of two integers in several different ways:

$$54 * 1 = 27 * 2 = 18 * 3 = 9 * 6 \dots$$

Thus the **divisors of 54** are: **1,2,3,6,9,18,27,54**

Similarly, the divisors of 24 are: **1,2,3,4,6,8,12,24**

The numbers that these two lists share in common are **the common divisors of 54 and 24:**

1,2,3,6

The greatest of these is 6. That is, the greatest common divisor of 54 and 24. One writes:

$$\text{gcd}(54,24) = 6.$$