Greatest Common Divisor

Given two integers x, y calculates the greatest common divisor (gcd).

In mathematics, the greatest common divisor (gcd) of two or more integers, which are not all zero, is the largest positive integer that divides each of the integers. For example, the gcd of 8 and 12 is 4

Input

Two integers x and y other than 0

Output

The greatest common divisor (gcd) of x and y.

Example

Input:
8
12

Output:
4