

Problem Description

The greatest common divisor of 2 numbers, also known as the highest common factor, is the highest whole number that can divide those 2 numbers without leaving any remainder.

The formula for GCD is as below: [Do note that $a > b$ for all cases]

$$\gcd(a, b) = \gcd(b, a \bmod b).$$

$$\gcd(a, 0) = a$$

Input

2 numbers, a and b . It is not guaranteed that a is always greater than b or vice versa. However, both numbers will be below 10^9

Output

Output a single integer, the greatest common divisor of the 2 numbers.

Sample Input

12 8

Sample Output

4