
Iterative greatest common divisor

P88790_en

Write an iterative function that computes the greatest common divisor of two natural numbers a and b using the *fast* version of the Euclidean algorithm.

Interface

C++	<code>int gcd(int a, int b);</code>
C	<code>int gcd(int a, int b);</code>
Java	<code>public static int gcd(int a, int b);</code>
Python	<code>gcd(a, b) # returns int</code> <code>gcd(a: int, b: int) -> int</code>

Precondition

Neither a nor b are negative, and at least one of them is strictly greater than zero.

Observation

You only need to submit the required procedure; your main program will be ignored.

Problem information

Author: Jordi Petit

Translator: Carlos Molina

Generation: 2026-01-25T12:17:00.554Z

© Jutge.org, 2006–2026.

<https://jutge.org>