

Euclid's Algorithm To Find GCD(m,n)

//English Like Algorithm

Euclid's algorithm for computing GCD(m,n)

Step 1: If $n = 0$, return the value of m as the answer and stop; otherwise proceed to Step 2.

Step 2: Divide m by n and assign the value of the remainder to r .

Step 3: Assign the value of n to m and the value to r to n . Go to Step 1.

//Pseudo Code

Euclid (m,n)

//Computes gcd(m,n) by Euclid's algorithm

//Input: Two nonnegative, not both zero integers m and n

//Output: Greatest Common Divisor of m and n

while $n \neq 0$ do

$r \leftarrow m \bmod n$

$m \leftarrow n$

$n \leftarrow r$

Computation of GCD in Java:

<https://github.com/AvinandanBose/JavaClassicalDataStructure/blob/main/Euclid.java>