

*Euclid's algorithm*

**Data:**

- a – integer positive number
- b – integer positive number

**Result:** The greatest common divisor (GCD) of two numbers: a and b

**function** *algorithmEuclids(a,b)*

**begin**

```
    while  $b \neq 0$  do
        if  $a > b$  then
            |  $a \leftarrow a - b$ 
        else
            |  $b \leftarrow b - a$ 
        end
```

```
    end
```

**end**

**Algorithm 1:** Euclid's algorithm

The Euclidean algorithm, or Euclid's algorithm, is an efficient method for computing the greatest common divisor (GCD) of two numbers, the largest number that divides both of them without leaving a remainder (see pseudocode 1).