# Pseudocode

## Theory

What is gcd: Greatest Common Divisor (GCD) of two integers A and B is the largest integer that divides both A and B.

How does it work: first we know gcd(a, 0) = a, gcd(0, b) = b, then we have a thought that make the number a or b, one of them become zero to find the gcd

Second we know a (suppose a>b) =b\*h+c(c>=0), then we found gcd(b,c) using the Euclidean Algorithm since gcd(a,b) = gcd(b,c)

Then what arranged to do is: gcd(a, b) -> gcd(b, a%b) until a%b=0

Pseudocode:

Aimed to produce a function called Euclidean algorithm which can found the gcd through Euclidean algorithm

function euclideanAlgorithm(a, b):

in here we aimed to use a loop to do this job: gcd(a, b) -> gcd(b, a%b) until a%b=0

each loop, a -> b, b -> remainder, until remainder = 0

while b! = 0:

remainder = a % b

a = b

b = remainder

return a