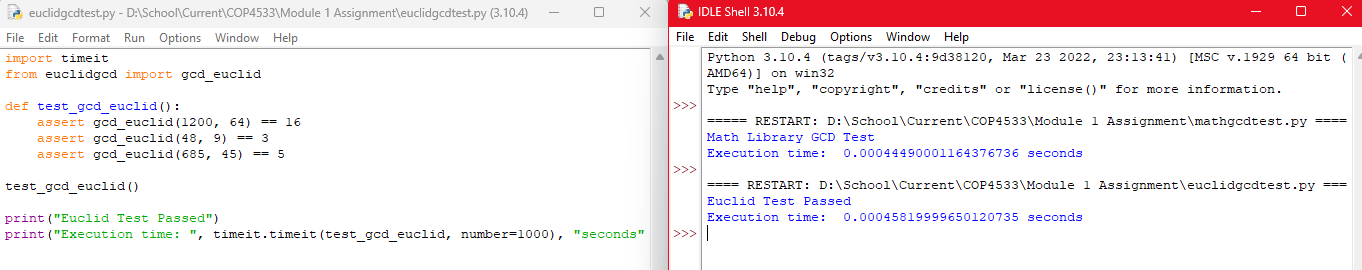
Images and Commentary:

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

I am not sure what the assignment wants when it says to write commentary. The first image is both functions by themselves, the second image is running the testfile on mathgcd, and the third image is running the testfile on euclidgcd. I am surprised that math.gcd() returned a with a faster response.

Code as Text:

mathgcd.py:

import math

def gcd\_math(a, b):

return math.gcd(a, b)

euclidgcd.py:

def gcd\_euclid(a, b):

while b:

a, b = b, a % b

return a

mathgcdtest.py:

import timeit

from mathgcd import gcd\_math

def test\_gcd\_math():

assert gcd\_math(1200, 64) == 16

assert gcd\_math(48, 9) == 3

assert gcd\_math(685, 45) == 5

test\_gcd\_math()

print("Math Library GCD Test")

print("Execution time: ", timeit.timeit(test\_gcd\_math, number=1000), "seconds")

euclidgcdtest.py:

import timeit

from euclidgcd import gcd\_euclid

def test\_gcd\_euclid():

assert gcd\_euclid(1200, 64) == 16

assert gcd\_euclid(48, 9) == 3

assert gcd\_euclid(685, 45) == 5

test\_gcd\_euclid()

print("Euclid Test Passed")

print("Execution time: ", timeit.timeit(test\_gcd\_euclid, number=1000), "seconds")