*TASK 1:*

*PSEUDOCODE*

*def gcd(a, b):*

*# Base case: If b is zero, then a is the GCD*

*if b is zero:*

*return a*

*else:*

*# Recursive case: Calculate GCD recursively with new values*

*return gcd(b, a modulo b)*

*# Explanation:*

*# The gcd function calculates the greatest common divisor (GCD) of two numbers.*

*# It uses recursion to find the GCD.*

*# In each recursive call, the function checks if b is zero. If it is, then a is returned as the GCD.*

*# If b is not zero, the function recursively calls itself with b as the new first number*

*# and the remainder of a divided by b as the new second number.*

*# This process continues until b becomes zero, at which point the GCD is found.*