

ESS101 : Programming 1 (C Programming)

LAB - 2

Due: 19th August, 2019 @ 17:00

Problem 1: (Euclid's Algorithm) Write a (C) program to input two integers and print the GCD (Greatest Common Divisor) of the two numbers. *Note:* If both the input numbers are 0, then the output should be "Invalid input".

Sample Input 1: 10 -15

Output 1: 5

Sample Input 2: 0 0

Output 2: Invalid input

Sample Input 3: 73 0

Output 2: 73

Problem 2: (Sieve of Eratosthenes) Write a (C) program to input a positive integer and print the number of prime numbers less than or equal to the input number. *Note:* If the input number is ≤ 1 , then the output should be 0.

Sample Input 1: 13

Output 1: 6

Sample Input 2: -5

Output 2: 0