**LAB- 2**

**L2. 1)** Write an algorithm for finding the Greatest Common Divisor (GCD) of two numbers using Euclid’s algorithm. Write a program to implement the Euclid’s algorithm.

**L2. 2)** Write a program to find GCD using consecutive integer checking method and analyze its time efficiency.

**L2. 3)** Write a program to find GCD using middle school method and analyze its time efficiency.

**Additional Questions:**

**L2. a)** Write a program for computing **⌊√n ⌋** for any positive integer and analyze its time efficiency. Besides assignment and comparison, your program may only use the four basic arithmetic operations.

**L2. b)** Write a program to implement recursive solution to the Tower of Hanoi puzzle and analyze its time efficiency.

**L2. c)** Write a program to compute the **nth** Fibonacci number recursively and analyze its time efficiency.