

# CCS1063 | CSE1062 Fundamentals of Programming

- Lab Sheet 05 -

## Task 1

#### **Guess the Number Game (20 minutes)**

Write a C program that generates a random number between 1 and 100. The user should try to guess the number, and the program should provide hints (higher or lower) after each incorrect guess.

# Task 2

## **Binary to Decimal Conversion (20 minutes)**

Write a C program that takes an input binary number (up to 8 digits) from the user and converts it into its decimal equivalent.

## Task 3

## Prime Number Checker (20 minutes)

Develop a C program that prompts the user to enter a positive integer and determines whether it is a prime number or not.

# Task 4

#### Caesar Cipher (20 minutes)

Write a C program that implements the Caesar cipher encryption. Prompt the user to enter a message and a shift value. Encrypt the message by shifting each letter in the message by the given shift value (e.g., if the shift value is 3, 'A' becomes 'D', 'B' becomes 'E', and so on). Ensure that the program handles uppercase and lowercase letters correctly.