IT2030 – Object Oriented Programming   **Semester 1, 2023**

Exercise 1

Create a Java program that reads a positive integer (n) from the user and calculates the factorial of that number(n!) using a loop.

Hints: 1! = 1
         4! = 4 * 3 * 2 * 1 = 4 * 3!
         n! = n * (n - 1)!

Exercise 2

Develop a Java program that prompts the user to enter a series of numbers (terminated by a negative number) and then computes and displays the average of those numbers.

Hint: Use Scanner class to accept keyboard inputs

Exercise 3

Create a Java program that takes an integer as input and prints the multiplication table for that number up to a specified range, e.g., up to 10.

Exercise 4

Write a Java program that takes a string as input from the user and displays the reverse of that string using a loop.

Exercise 5

Create a Java program that takes a string as input and counts the occurrences of a specific character (e.g., 'a') in the string using a loop.