Tasks Lab 5:

- Perform the first 3 tasks within the lab for <u>Attendance</u>. The rest are allowed to be submitted on the following Weekend (on google classroom).
- Perform all of the tasks within the lab for a possible bonus at the end of the semester.
- All questions carry equal weightage/ marks.

Task 1:

Write a C program to calculate the factorial of a given non-negative integer using a loop. Prompt the user to enter the number, then compute and display its factorial using a for loop.

Task 2:

Develop a C program to print the Fibonacci series up to a specified number of terms. Prompt the user to enter the number of terms, then display the Fibonacci series using a do-while loop.

Task 3:

Create a C program to determine if a given year is a leap year or not. Prompt the user to enter the year, then use both the ternary operator to check and print whether the year is a leap year or not. (leap years repeat every 4 years, 2024 is a leap year and 2020 was a leap year too, next leap year is going to be 2028)

Task 4:

Write a C program to find the sum of all prime numbers within a specified range. Prompt the user to enter the range (start and end values), then calculate and display the sum of prime numbers in the range using a while loop.