OS LAB - EXERCISES – 22.08.2025

1. Write a C program where the main process creates two child processes. One child process will print all even numbers between 1 and 20, and the other will print all odd numbers between 1 and 20.

2. Write a C program where the main process creates two child processes. One child process will calculate and print the factorials of even numbers from 2 to 10, and the other child process will calculate and print the factorials of odd numbers from 1 to 9.

3. Write a C program that does the following:
   a. The main program asks the user to enter a string.
   b. It creates two child processes using fork().
   c. One child process runs a program that counts and prints the number of vowels in the string.
   d. The other child process runs a different program that reverses the string and prints it.
   e. Use exec() in each child process to run the separate programs, passing the input string as an argument.
   f. The parent process waits for both child processes to finish and then prints a message saying the work is done.
4. Write a C program that demonstrates the creation of multiple processes and running separate programs using fork() and exec() system calls to perform different string operations on a user-input string.