Lab Task 1

- 1. Write a program that checks if a number entered by the user is positive, negative, or zero.
- 2. Create a program that determines if a given year is a leap year.
- 3. Implement a program that calculates the factorial of a number using a while loop.
- 4. Write a program that checks if a given number is prime or not.
- 5. Create a program that prints the Fibonacci series up to a specified number of terms.
- 6. Implement a program that calculates the sum of all numbers in a given range using a for loop.
- 7. Write a program that checks if a given string is a palindrome.
- 8. Create a program that generates the multiplication table of a given number using nested loops.
- 9. Implement a program that finds the largest element in an array using if-else statements.
- 10. Write a program that simulates a simple calculator with options for addition, subtraction, multiplication, and division.