

## **Course Name: Data Structures**

### **Lab # 2**

Answer the following questions using C++ with loops and if statements:

1. Write a program to check if a number is even or odd.
2. Write a program to find the largest of two numbers.
3. Write a program to print numbers from 1 to 10 using a for loop.
4. Write a program to print the sum of numbers from 1 to n.
5. Write a program to check if a number is positive, negative, or zero.
6. Write a program to display multiplication table of a number.
7. Write a program to calculate factorial of a number.
8. Write a program to print Fibonacci series up to n terms.
9. Write a program to find the largest of three numbers.
10. Write a program to check if a year is a leap year.
11. Write a program to print all even numbers from 1 to 100.
12. Write a program to print all odd numbers from 1 to 100.
13. Write a program to reverse a number.
14. Write a program to find the sum of digits of a number.
15. Write a program to check if a number is a palindrome.
16. Write a program to check if a number is prime.
17. Write a program to print prime numbers between 1 and 100.
18. Write a program to calculate the power of a number.
19. Write a program to find the greatest common divisor (GCD) of two numbers.
20. Write a program to find the least common multiple (LCM) of two numbers.
21. Write a program to display the pattern of stars in a triangle.
22. Write a program to display the multiplication tables from 1 to 10.
23. Write a program to count the number of digits in a number.
24. Write a program to check if a number is an Armstrong number.
25. Write a program to print the sum of even and odd numbers separately from 1 to n.