

**Total Marks: 20** 

## **Practical questions**

**Attempt any 5 Question.** 

## 1. Arithmetic Operations with User Input

Write a program that takes two integer inputs from the user and performs all basic arithmetic operations (addition, subtraction, multiplication, division, and modulus) on them. Display the results of each operation.

## 2. Bitwise Operations

Implement a program that takes two integers as input and displays their bitwise AND, OR, XOR, left shift, and right shift results.

## 3. Unary Operators

Write a Java program that demonstrates the use of both pre-increment and post-increment operators. Use a loop to show how the values change with each iteration.

## 4. Leap Year Checker

Write a Java program that checks whether a given year is a leap year. A year is a leap year if:

- o It is divisible by 4,
- o If it is divisible by 100, it should also be divisible by 400.

## 5. Switch Case Menu

Develop a simple menu-driven program using a switch-case statement. The menu should include operations like addition, subtraction, multiplication, and division. The program should take user input for the operation and two numbers to perform the calculation.

#### 6. Continue with Even Numbers

Write a program that prints all even numbers from 1 to 50. Use a continue statement to skip odd numbers.

## 7. Breaking a Loop

Create a program that prompts the user to enter a series of numbers. The program should terminate when the user enters a negative number and then display the sum of all positive numbers entered.

## 8. Factorial Calculation

Write a program that calculates the factorial of a given number using a for loop. Factorial of n (denoted as n!) is the product of all positive integers less than or equal to n.

## 9. Fibonacci Series

Implement a program that prints the first 10 numbers in the Fibonacci series using a while loop.

## 10. Pattern Printing

Develop a program to print the following pattern using nested loops:

```
*

* *

* * *

* * *

* * * *
```

# "जो अपने सपनों का पीछा करते हैं, वही अपनी किस्मत खुद बनाते हैं।" (Those who chase their dreams create their own destiny.)

Best Of Luck