DMAD-1-02P: Java Programming Lab

Course: Java Programming Lab	
Course Code: DMAD-1-02P	
Course Outcomes (COs)	
After the completion of this course, the students will be able to:	
CO1	Develop the ability to apply these fundamentals in creating well-structured and readable code.
CO2	Acquire the skills to proficiently design and build Java.
CO3	Hone the art of debugging by mastering techniques to identify and rectify errors in Java code.
CO4	Develop a working knowledge of Java's extensive set of standard libraries and APIs.
CO5	Cultivate the skills necessary for collaborative software development. This involves working seamlessly within a team using version control systems like Git, adhering to coding standards, documenting code effectively, and embracing best practices. The goal is to produce software that is not only functional but also maintainable and scalable over time.

Detailed List of Programs:

Programme No.	Name of Program
P1	Write a simple program that prints "Hello, World!" to the console.
P2	Take two numbers as input and display their sum.
P3	Generate and print the multiplication table for a given number.
P4	Compute the factorial of a given number.
P5	Check whether a given number is prime or not.
P6	Create a program that prints the Fibonacci sequence up to a specified number of terms.
P7	Implement a switch statement to handle different cases based on user input.
P8	Find the largest element in an array.
P9	Write a program to reverse the elements in an array.
P10	Create a program that performs linear search in an array.

P11	Design a class representing a book with attributes like title, author, and publication year.
P12	Implement inheritance by creating a base class and derived class.
P13	Create a simple interface and implement it in a class.
P14	Develop a program that demonstrates the use of try-catch blocks for handling exceptions.
P15	Write a program that reads input from the user and handles input mismatch exceptions.
P16	Read and write data to a text file using Java I/O classes.
P17	Create a program to list all files in a directory.
P18	Implement a simple multithreaded program using the Thread class.