Week-2 Lab **Date: April 21, 2025**

Note:

1. Students will write the JAVA code for the following programming assignments and will execute through Command Prompt or Intellij IDEA IDE.
2. After successful execution, all the executed code and output needs to combine in a single PDF file to submit.
3. Submit the pdf file on Moodle link:

Problem Statements:

2.1 WAP to find out the sum of command line arguments.

2.2 WAP to count the number of characters in a given string, to reverse the string and check whether it is palindrome or not?

2.3 WAP to Find largest and smallest numbers in an array.

2.4 Java Program to Find the Sum and Product of Elements in a Row/Column of a Matrix.

2.5 WAP to create class Number with only one private instance variable as a double primitive type, include the following methods isZero(), isPositive(), isNegative( ), isOdd( ), isEven( ), isPrime(), isAmstrong() in this class and all above methods should return boolean primitive type like for isPositive() should return “Positive = True”.

2.6 WAP to insert 3 numbers from the keyboard and find a greater number among 3 numbers.

2.7 WAP to illustrate use of this keyword.

2.8 Write a program to demonstrate static variables, methods, and blocks.

2.9 WAP to create a class named Shape and create three subclasses Circle, Triangle and Square, each class has two-member functions named draw () and erase (). Implement this concept using polymorphism.

2.10 WAP to create a class Employee with a method called calculateSalary(). Create two subclasses Manager and Programmer. In each subclass, override the calculateSalary() method to calculate and return the salary based on their specific roles.

2.11 WAP to count the total number of odd numbers between 1-100, and display the sum of them.