Lab Assignment 1
Programming Projects with Java1

1	WAP to print * ** *** ****	CO1
2	WAP to print a smiley emoji	CO1
3	WAP to print a poem	CO1
4	Input principal, rate, and time from the user and calculate simple interest using the formula: Simple Interest = (Principal * Rate * Time) / 100	CO1
5	WAP to find the size of primitive datatypes	CO1
6	WAP to swap values of two variable with n without using third variable	CO1
7	WAP to area and perimeter of a circle, where diameter=20.8	CO1
8	Wap to display reverse of two-digit number.	CO1
9	Wap to find the maximum combination of 100rs	CO1
10	Write a Java program that takes two numbers from the user and performs addition, subtraction, multiplication, division, and modulus operations. Display the results.	CO1
11	Input three numbers from the user and print the largest one using relational operators.	CO1
12	Write a program that checks whether an integer entered by the user is even or odd using the modulus operator.	CO1
13	Write a program to check if a year entered by the user is a leap year or not. Use logical operators.	CO1
14	Input three numbers and calculate their average using operators	CO1
15	Write a program that demonstrates the use of bitwise operators (&, |, ^, ~, <<, >>) on two integers and print the results.	CO1
16	Input original price and discount percentage and calculate the final price after applying the discount	CO1
17	Input a number and calculate the sum of its digits using operators	CO1
18	Given two numbers, find the remainder when one is divided by the other without using the % operator.	CO1
19	Write a program to convert temperature from Celsius to Fahrenheit and vice versa. Formulas: • F = (C * 9/5) + 32 • C = (F - 32) * 5/9	CO1
20	Input length and width and calculate the perimeter and area of a rectangle.	CO1

CO1	To remember and comprehend the fundamental concepts of Java programming by reading, writing, executing, and debugging Java applications within the Eclipse framework. This includes the ability to understand and explain variables, constants, primitive data types, and core libraries along with their functionalities	L1,L2
CO2	To apply operators and type casting mechanisms proficiently to manipulate and transform data within Java programs, ensuring accurate and efficient computation	L3,L4
CO3	To critically analyze and systematically implement conditional statements to effectively govern program flow based on diverse logical conditions	L3,L4
CO4	To design and critically evaluate iterative solutions utilizing loops to efficiently address repetitive computational problems	L5,L6
CO5	To design and proficiently manipulate arrays for systematic storage and management of data collections	L3,L6
CO6	Develop and implement modular programs using methods, and demonstrate object-oriented principles through classes, objects, and enumerations	L2,L3,L6