COU3304 – FUNDAMENTALS OF PROGRAMMING
PRACTICAL GUIDE
19th February 2025
Department of Computer Science

(Q1) Write a Java program to print your name.

```
public class PrintName {
    public static void main(String[] args) {
        System.out.println("Nithesh");
    }
}
```

(Q2) Write a program to display summation of two variables. The variables as follows,

X = 5 , Y = 10

```
public class Summation {
    public static void main(String[] args) {
        int X = 5;
        int Y = 10;
        int sum = X + Y;

        System.out.println("The sum of X and Y is: " + sum);
    }
}
```

(Q3) Write a Java program that display values of all the primitive data types (int, long, float, double, char, and boolean). The program should assign appropriate values to these types and then print each value to the console.

```
public class PrimitiveDataTypes {
    public static void main(String[] args) {

        int age = 25;         // Integer type (4 bytes)
        long population = 7800000000L;  // Long type (8 bytes)

        float price = 19.99f;   // Float type (4 bytes)
        double pi = 3.14159;    // Double type (8 bytes)


        char grade = 'A';       // Char type (2 bytes)



        boolean isJavaFun = true;  // Boolean type (1 byte)
```

```
        System.out.println("Integer (age): " + age);
        System.out.println("Long (population): " + population);
        System.out.println("Float (price): " + price);
        System.out.println("Double (pi): " + pi);
        System.out.println("Char (grade): " + grade);
        System.out.println("Boolean (isJavaFun): " + isJavaFun);
    }
}
```

(Q4) Write a Java program that take two integer values and perform addition, subtraction, multiplication, division, and modulus operations on them. Then, display the results of each operation.

```
public class ArithmeticOperators {
    public static void main(String[] args) {

        int num1 = 15;
        int num2 = 4;


        int sum = num1 + num2;
        int difference = num1 - num2;
        int product = num1 * num2;
        int quotient = num1 / num2;
        int remainder = num1 % num2;


        System.out.println("Sum: " + sum);
        System.out.println("Difference: " + difference);
        System.out.println("Product: " + product);
        System.out.println("Quotient: " + quotient);
        System.out.println("Remainder: " + remainder);
    }
}
```

(Q5) Write a Java program that initialize an integer variable, then use the compound operators (+=, -=, *=, /=, and %=) to perform arithmetic operations on the variable. Finally, display the results after each operation.

```
public class CompoundAssignmentOperators {
    public static void main(String[] args) {
                int number = 10;

        number += 5;
        System.out.println("After += 5: " + number);

        number -= 3;
        System.out.println("After -= 3: " + number);

        number *= 2;
        System.out.println("After *= 2: " + number);

        number /= 4;
        System.out.println("After /= 4: " + number);

        number %= 3;
        System.out.println("After %= 3: " + number);
    }
}
```

(Q6) Write a program to accept two numbers from a user and display them.

```
import java.util.Scanner;

public class AcceptAndDisplayNumbers {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the first number: ");
        int firstNumber = scanner.nextInt();

        System.out.print("Enter the second number: ");
        int secondNumber = scanner.nextInt();

        System.out.println("You entered the numbers: " +
firstNumber + " and " + secondNumber);

        scanner.close();
    }
}
```

Self-Assessment

1. Write a Java program to print "I am a student of OUSL".
2. Write a program to display the product of two variables. The variables are: A = 7, B = 3.
3. Write a Java program for a simple calculator that takes two integer values representing the price of two items. The program should perform addition (total price), subtraction (price difference), multiplication (price of multiple items), division (price per item if divided equally), and modulus (remaining money after dividing price) operations on them. Then, display the results of each operation. Let the variables be: Item1 = 25,Item2 = 10
4. Write a program **to accept** two numbers **from the user**, calculate their average, and display the result.