

```

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

        // -----
        // 1. DATA TYPES
        // -----
        int age = 20;
        double height = 5.9;
        char grade = 'A';
        boolean isStudent = true;
        String name = "John";

        System.out.println("=== Data Types Demo ===");
        System.out.println("Name: " + name);
        System.out.println("Age: " + age);
        System.out.println("Height: " + height);
        System.out.println("Grade: " + grade);
        System.out.println("Is Student: " + isStudent);

        // -----
        // 2. IF-ELSE STATEMENT
        // -----
        System.out.println("\n=== If-Else Demo ===");
        if (age >= 18) {
            System.out.println("You are an adult.");
        } else {
            System.out.println("You are a minor.");
        }

        // -----
        // 3. SWITCH STATEMENT
        // -----
        System.out.println("\n=== Switch Demo ===");
        char dayCode = 'M';

        switch (dayCode) {
            case 'M':
                System.out.println("Monday");
                break;
            case 'T':
                System.out.println("Tuesday");
                break;
            case 'W':
                System.out.println("Wednesday");
                break;
            default:
                System.out.println("Invalid day code");
        }

        // -----
        // 4. FOR LOOP
        // -----
        System.out.println("\n=== For Loop Demo ===");
        for (int i = 1; i <= 5; i++) {
            System.out.println("Count: " + i);
        }

        // -----
        // 5. WHILE LOOP
        // -----
        System.out.println("\n=== While Loop Demo ===");
        int counter = 5;
        while (counter > 0) {
            System.out.println("Counter: " + counter);
            counter--;
        }
    }
}

```