Java Practice Exercises - Chapter 1

Exercise 1: Variable Practice

Create a Java program with variables for personal information:

```
public class PersonalInfo {
    public static void main(String[] args) {
        // TODO: Create variables for:
        // - Your name (String)
        // - Your age (int)
        // - Your height in feet (double)
        // - Whether you're a student (boolean)

        // TODO: Print all information using System.out.println()
    }
}
```

Expected Output:

```
Name: John Doe
Age: 20
Height: 5.8 feet
Student: true
```

Exercise 2: Simple Calculator

Create a program that performs basic math operations:

```
public class Calculator {
    public static void main(String[] args) {
        int num1 = 15;
        int num2 = 4;

        // TODO: Calculate and print:
        // Addition, Subtraction, Multiplication, Division, Remainder
    }
}
```

Exercise 3: Grade Checker

Write a program that checks if a grade is passing:

```
public class GradeChecker {
    public static void main(String[] args) {
        int grade = 85;

        // TODO: Use if-else to check:
        // If grade >= 90: print "Excellent"
```

```
        // If grade >= 80: print "Good"
        // If grade >= 70: print "Average"
        // If grade >= 60: print "Pass"
        // Otherwise: print "Fail"
    }
}
```

Exercise 4: Number Counter

Create a program that counts from 1 to 10:

```
public class Counter {
    public static void main(String[] args) {
        // TODO: Use a for loop to print numbers 1 through 10
        // Each number should be on a new line
    }
}
```

Exercise 5: User Input

Create a program that gets user input and responds:

```
import java.util.Scanner;

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

        // TODO: Ask for user's name and age
        // TODO: Print a personalized greeting
        // Example: "Hello Alice, you are 22 years old!"
    }
}
```

Solutions

Exercise 1 Solution:

```
public class PersonalInfo {
    public static void main(String[] args) {
        String name = "John Doe";
        int age = 20;
        double height = 5.8;
        boolean isStudent = true;

        System.out.println("Name: " + name);
        System.out.println("Age: " + age);
        System.out.println("Height: " + height + " feet");
        System.out.println("Student: " + isStudent);
    }
}
```

Exercise 2 Solution:

```
public class Calculator {
    public static void main(String[] args) {
        int num1 = 15;
        int num2 = 4;

        System.out.println("Addition: " + (num1 + num2));
        System.out.println("Subtraction: " + (num1 - num2));
        System.out.println("Multiplication: " + (num1 * num2));
        System.out.println("Division: " + (num1 / num2));
        System.out.println("Remainder: " + (num1 % num2));
    }
}
```