**7 Java Assignments on Variables and Data Types**

**🔸 1. Student Bio Data**

**Task:** Create a Java program to store and print a student’s name, age, gender, college name, percentage, and pass/fail status.  
**Focus:** String, int, char, double, boolean  
📌 *Also format the output neatly.*

**🔸 2. Area & Perimeter Calculator**

**Task:** Take input for length and breadth of a rectangle. Calculate and print its area and perimeter.  
**Focus:** Variable declaration, int, float, double  
🔍 *Hint: Area = length × breadth*

**🔸 3. Salary Calculation**

**Task:** Create a program to input basic salary and calculate gross salary using the formula:

Gross Salary = Basic + HRA + DA  
HRA = 20% of Basic, DA = 80% of Basic  
**Focus:** double, float, variable usage, expressions

**🔸 4. Swap Two Variables**

**Task:** Swap values of two variables using a third variable.

**Focus:** Variable logic, arithmetic operations  
🎯 *Learn logic and storage flow.*

**🔸 5. Data Type Prediction Game**

**Task:** Given a variable and its value, predict its best suitable data type (e.g., true, 3.14, 'A', 1000, "Hello") and declare them in Java.  
**Focus:** Understanding which data types suit what kind of data

**🔸 6. Temperature Converter**

**Task:** Write a program to convert temperature from Celsius to Fahrenheit and vice versa.

Formula: F = (C × 9/5) + 32  
**Focus:** double, float, formula-based logic

**🔸 7. Variable Naming Practice**

**Task:** Declare 10 meaningful variables following Java naming conventions for a Banking System (e.g., accountNumber, customerName, balance).  
Then print them with example values.  
**Focus:** Good variable names, readability, String, int, double, boolean