**Assignment 1: Tax Slab Calculator for Income Groups**

**Scenario**:  
Create a tax calculator for individuals. The user enters their income range (as a string) and the program calculates the applicable tax percentage.

**Requirements**:

* Use a String as the switch expression.
* Allow inputs like "Low", "Medium", "High", "Very High".
* Provide a default case for invalid inputs.

**Income Categories**:

* Low (≤ 2,50,000): Tax-free
* Medium (2,50,001 – 5,00,000): 5% tax
* High (5,00,001 – 10,00,000): 20% tax
* Very High (> 10,00,000): 30% tax

**Expected Input**:

Enter your income category (Low/Medium/High/Very High): Medium

**Expected Output**:

yaml

Income Category: Medium

Tax Percentage: 5%

**Hints**:

* Use strings like "Low", "Medium", "High", "Very High" for cases.
* Implement a method to handle invalid inputs.

**Assignment 2: Access Control System**

**Scenario**:  
Build a role-based access control system where the user inputs their role (e.g., Admin, Manager, Employee, Guest), and the program displays their access rights. Additionally, handle multiple roles by accepting comma-separated input.

**Requirements**:

* Use a String as the switch expression.
* Implement a loop to parse comma-separated roles.
* Combine multiple roles dynamically to calculate access levels.

**Details**:

* Admin: Full access (Read, Write, Execute)
* Manager: Moderate access (Read, Write)
* Employee: Limited access (Read)
* Guest: View-only access

**Expected Input**:

Enter your role(s): Admin, Employee

**Expected Output**:

Access Rights: Full access, Limited access

**Hints**:

* Use .split(",") to handle multiple roles.
* Implement a nested loop to evaluate each role.

**Assignment 3: Multi-Language Greeting System**

**Scenario**:  
Create a multi-language greeting system. The user inputs their preferred language (e.g., English, Spanish, French, etc.) and the time of day (Morning, Afternoon, Evening, Night). The program displays a greeting in the specified language and time of day.

**Requirements**:

* Use String for both language and time of day in nested switch statements.
* Provide a default case for unsupported inputs.

**Details**:  
For English:

* Morning: Good Morning
* Afternoon: Good Afternoon
* Evening: Good Evening
* Night: Good Night

For Spanish:

* Morning: Buenos días
* Afternoon: Buenas tardes
* Evening: Buenas noches
* Night: Buenas noches

**Expected Input**:

Enter language: Spanish

Enter time of day: Morning

**Expected Output**:

Greeting: Buenos días

**Hints**:

* Handle multiple languages using nested switch.
* Add a default case for unsupported languages or times.

**Assignment 4: Discount Calculator with Membership Levels**

**Scenario**:  
Create a discount calculator for an e-commerce platform. The user inputs a product category (Electronics, Clothing, Groceries) and membership type (Gold, Silver, None). The program calculates the final discount.

**Requirements**:

* Use a String for both category and membership type.
* Handle nested discounts based on membership levels.
* Provide combined discounts for special memberships.

**Details**:

* Electronics: 10%
* Clothing: 20%
* Groceries: 5%
* Membership Discounts:
  + Gold: Additional 10%
  + Silver: Additional 5%

**Expected Input**:

Enter category: Electronics

Enter membership type: Gold

Enter price: 20000

**Expected Output**:

yaml

Base Discount: 10%

Membership Discount: 10%

Final Price: 16,000

**Hints**:

* Use nested switch statements for category and membership type.
* Calculate total discounts iteratively.