

# Assignment # 01

## Question 1: Customer Discount Tier System

Write a Python program that assigns a customer discount tier based on their loyalty points and purchase history.

### Requirements:

- Ask the user for:
  - `loyalty_points` (int)
  - `is_frequent_buyer` (yes/no, convert to boolean)
- Use the following rules:
  - **Gold Tier:** `loyalty_points > 2000`
  - **Silver Tier:** `loyalty_points` between 1000 and 2000 (inclusive)
  - **Bronze Tier:** `loyalty_points` between 500 and 999
  - **Standard Tier:** below 500
- If the customer is a frequent buyer, upgrade them one tier higher (but not beyond Gold).
- Print the final tier and discount percentage:
  - Gold: 15%, Silver: 10%, Bronze: 5%, Standard: 0%

### Example Output:

```
Enter loyalty points: 800
Are you a frequent buyer? (yes/no): yes
Customer Tier: Silver
Discount: 10%
```

## Question 2: Smart Banking Service Recommender

Create a program that recommends banking services based on customer profile and financial behavior.

### Requirements:

- Ask the user for:
  - age (int)
  - annual\_income (float)
  - credit\_score (int)
  - is\_student (yes/no → boolean)
  - account\_balance (float)
- Implement the following recommendation logic using **if-elif-else ladder** and **logical operators**:

### Service Recommendations:

1. **Premium Banking**: credit\_score  $\geq$  750 AND annual\_income  $\geq$  100000
2. **Student Advantage**: is\_student is True AND age  $<$  25
3. **Credit Builder**: credit\_score  $<$  650 AND account\_balance  $\geq$  5000
4. **Wealth Management**: annual\_income  $\geq$  150000 OR account\_balance  $\geq$  100000
5. **Basic Banking**: All other customers

### Special Conditions:

- If customer qualifies for multiple services, recommend **ALL** applicable services
- If customer is under 18, automatically recommend "**Youth Account**" and ignore all other recommendations
- Use **nested conditionals** to handle the age check first

### Example Output:

Age: 22

Annual Income: 120000

Credit Score: 780

Are you a student? (yes/no): no

Account Balance: 150000

Recommended Services: Premium Banking, Wealth Management