### 1. Scenario: Library System

You are creating a system to manage books in a library. Each book has a title, author, and ISBN. The system needs to allow updating the book’s availability status (whether it’s checked out or not) and updating its title.

* **Question**:  
  How would you define a Book class with properties title, author, and isbn?
  + What methods would you include to:
    - Change the availability status (e.g., checkOut() and returnBook() methods)?
    - Update the book’s title (e.g., updateTitle(newTitle) method)?

### 2. Scenario: Product with Discount

You are creating an e-commerce platform, and each product has a name, price, and category. You need to be able to apply a discount to the product and retrieve its final price after applying the discount.

* **Question**:  
  How would you define a Product class with properties name, price, and category?
  + What methods would you include to:
    - Apply a discount to the product (e.g., applyDiscount(amount) method)?
    - Retrieve the price after discount (e.g., getPriceAfterDiscount() method)?

### 3. Scenario: Bank Account System

You are designing a banking system. Each account has an account holder name, account number, and balance. You need to be able to deposit, withdraw, and check the balance of the account.

* **Question**:  
  How would you define a BankAccount class with properties accountHolderName, accountNumber, and balance?
  + What methods would you include to:
    - Deposit money into the account (e.g., deposit(amount) method)?
    - Withdraw money from the account (e.g., withdraw(amount) method)?
    - Check the current balance (e.g., getBalance() method)?

### 4. Scenario: Vehicle Management

You are managing a fleet of vehicles. Each vehicle has a model, license plate, and mileage. You need to track the mileage whenever the vehicle is driven.

* **Question**:  
  How would you define a Vehicle class with properties model, licensePlate, and mileage?
  + What methods would you include to:
    - Simulate driving the vehicle (e.g., drive(miles) method, which increases the mileage)?
    - Get the current mileage of the vehicle (e.g., getMileage() method)?

### 5. Scenario: Grading System

You are creating a system for students where each student has a name and a grade for a subject. The system should allow updating the student’s grade.

* **Question**:  
  How would you define a Student class with properties name and grade?
  + What methods would you include to:
    - Set or update the grade for the student (e.g., setGrade(newGrade) method)?
    - Retrieve the student’s current grade (e.g., getGrade() method)?