. **Design a banking system where customers can:**

* **Open different types of accounts (e.g., Savings and Checking).**
* **Deposit money.**
* **Withdraw money.**
* **Check their account balance.**

**You’ll create a base class Account, and two derived classes SavingsAccount and CheckingAccount. You'll also implement methods for performing various banking operations**

**Step 1: Define the Base Class Account**

The Account class will be the abstract base class for all accounts. It will contain:

* Attributes for account\_number and balance.
* Abstract methods for withdraw() and a regular method for deposit().

**Task:**

Create the Account class and include the following:

1. A constructor to initialize the account\_number and balance (default balance is 0).
2. A method deposit(amount) to add money to the account.
3. An abstract method withdraw(amount) that needs to be implemented in derived classes.

**Step 2: Define the Derived Class SavingsAccount**

SavingsAccount will inherit from Account and implement its own rules for withdrawal (e.g., minimum balance).

**Task:**

1. Create a class SavingsAccount that inherits from Account.
2. Implement the withdraw() method with the following logic:
   * Ensure a minimum balance of $100 is maintained.
   * Deduct the amount from the balance if the withdrawal is allowed.

**Step 3: Define the Derived Class CheckingAccount**

CheckingAccount will also inherit from Account, but it has different rules (e.g., no minimum balance but a fee per transaction).

**Task:**

1. Create a class CheckingAccount that inherits from Account.
2. Implement the withdraw() method with the following logic:
   * Allow any withdrawal, but charge a transaction fee of $5 for every withdrawal.

**Step 4: Create a Customer Class**

This class will represent a bank customer. Each customer can have one or more accounts.

**Task:**

1. Create a Customer class that holds a customer’s name and accounts.
2. Include methods to:
   * Add an account.
   * View all accounts and their balances.

**Step 5: Implement and Test the Banking System**

1. **Create instances** of SavingsAccount and CheckingAccount for a customer.
2. **Perform banking operations** such as deposits and withdrawals.
3. **Check account balances** for the customer.