**Class & Object – Real-Life Scenario Questions in C#**

**Question 1: Library Management**

Create a class Book with properties BookId, Title, Author, and Price.

* Write a method DisplayBookInfo() to print book details.
* Create 3 book objects and display their details.

**Question 2: Hospital System**

Create a class Patient with fields PatientId, Name, and Disease.

* Add a method ShowDetails().
* Create 2 objects of Patient and display their details.

**Question 3: Online Shopping**

Create a class Product with properties ProductId, ProductName, Price, and Quantity.

* Write a method CalculateTotalPrice() that multiplies Price \* Quantity.
* Create a few Product objects and display the total bill.

**Question 4: School System**

Create a class Student with properties RollNo, Name, and Marks.

* Add a method CheckResult() that prints "Pass" if marks ≥ 40 else "Fail".
* Create 3 student objects and display their results.

**Question 5: Banking System**

Create a class BankAccount with properties AccountNumber, HolderName, and Balance.

* Write methods:
  + Deposit(amount) → increases balance
  + Withdraw(amount) → decreases balance (if sufficient balance)
* Create an account object, perform deposit and withdrawal operations, and display final balance.

**Question 6: Vehicle Management**

Create a class Car with properties CarId, Brand, and Mileage.

* Add a method DisplayCarInfo().
* Create 2 objects and print their details.

**Question 7: Employee Payroll**

Create a class Employee with properties EmpId, Name, and BasicSalary.

* Add a method CalculateNetSalary() (BasicSalary + 20% HRA – 10% Tax).
* Create 2 employee objects and display their net salary.

These are **real-world scenarios** where students must:

1. **Define classes** with properties/fields.
2. **Create objects**.
3. **Use methods** to perform operations.