

Assignment 1: Student Class

Create a Student class with:

- Variables: id, name
- Method: displayDetails()
- Create object in main() and print details

Concepts: Class, Object

Assignment 2: Employee Salary

Create an Employee class:

- Variables: empId, empName, salary
- Initialize values using **default constructor**
- Display employee details.

Concepts: Default Constructor

Assignment 3: Car Information

Create a Car class:

- Variables: brand, model, price
- Use **parameterized constructor**
- Create 2 objects with different data.

Concepts: Parameterized Constructor

Assignment 4: Book Details

Create a Book class:

- Default constructor sets values
- Parameterized constructor sets custom values
- Display details of both.

Concepts: Constructor overloading

Assignment 5: Bank Account

Create BankAccount class:

- Variables: accountNumber, holderName, balance
- Constructor to initialize data
- Method showAccount() prints details.

Concepts: Object initialization

Assignment 6: Product Management

Create a Product class:

- Variables: productId, productName, price
- Constructor uses this keyword
- Display product info.

Concepts: this keyword

Assignment 7: User Login System

Create User class:

- Variables: email, password
- One constructor takes email only
- Another takes email & password
- Display user credentials.

Concepts: Constructor overloading

Assignment 8: Mobile Store

Create Mobile class:

- Fields: brand, ram, storage, price
- Create multiple objects using different constructors
- Print mobile configuration.

Concepts: Object reuse & overloading

Assignment 9: Library Book System

Create LibraryBook class:

- Fields: bookId, title, author
- Constructor assigns values
- Method isAvailable() returns true/false

Concepts: Object behavior

Assignment 10: College Admission

Create StudentAdmission class:

- Default constructor → general admission
- Parameterized constructor → merit admission
- Display admission type.

Concepts: Constructor logic

Assignment 11: Constructor Chaining

Create Person class:

- Constructor with name
- Constructor with name & age
- Use this() to chain constructors.

Concepts: Constructor chaining

Assignment 12: E-Commerce Order

Create Order class:

- Fields: orderId, customerName, amount
- Multiple constructors
- Calculate tax inside constructor.

Concepts: Business logic in constructors

