



Iqra University, Islamabad Campus
Faculty of Computing & Technology
Object Oriented Programming (CSC231)
Assignment # 3

Problem # 1: [CLO2]

Write a Java program that defines a class called Book with attributes for title (String), author (String), price (double), and publicationYear (int). Implement a default constructor to initialize all attributes to default values and a parameterized constructor to set all attributes. Include appropriate getter and setter methods for all attributes. Additionally, implement a method called isNewRelease to determine if the book is a new release based on whether its publication year is within the last three years.

Use `LocalDate.now().getYear()` of `LocalDate` class from the `java.time` package. It retrieves the current year as an integer value.

The program should display whether each book is a new release or not.

Create instances of the class using input values from user (atleast 2) and display whether each book is a new release or not.

Problem # 2: [CLO2]

Write a Java program that defines a class called Employee with attributes for name (String), id (int), salary (double), and department (String). Implement a default constructor to initialize all attributes to default values and a parameterized constructor to set all attributes. Include appropriate getter and setter methods for all attributes. Additionally, implement a method called calculateAnnualSalary to calculate the employee's annual salary, assuming a standard 12-month salary.

The program should display the calculated annual salary for each employee.

Create instances of the class using different input values (atleast 2) and display the annual salary for each employee.

Problem # 3: [CLO2]

Write a Java program that defines a class called BankAccount with attributes for account number (String), balance (double), and account holder name (String). Implement a default constructor to initialize all attributes to default values and a parameterized constructor to set all attributes. Include appropriate getter and setter methods for all attributes. Additionally, implement methods for deposit and withdrawal, ensuring that withdrawal cannot exceed the available balance. Implement a method called displayAccountInfo to display account information.

The program should create instances of the BankAccount class using different input values (at least 2) and display the account information and balance after deposit and withdrawal operations.