

LAB TASKS:

Task - 01:

Create a class User with two public fields: int Age and string Name. In the Main method, create an object of class User and set Name to "Ali" and Age to 22. Then, output to the screen: "My name is {Name} and I'm {Age} years old." using object fields for Name and Age.

Task - 02:

Create a class called Date that includes three pieces of information as instance variables—a month (typeint), a day (typeint) and a year (typeint). Provide a method displayDate that displays the month, day and year separated by forward slashes(/). Write a test application named DateTest that demonstrates classDate's capabilities.

Use parameterized constructor.

Task - 03:

We are prototyping a robot that refills glasses during dinner. Every glass holds 200 milliliters. During dinner, people either drink water or juice, and as soon as there is less than 100 ml left in the glass, the robot refills it back to 200 ml. Create a class Glass with one public int field LiquidLevel and methods public Drink(int milliliters) that takes the amount of liquid that a person drank and public Refill() that refills the glass to be 200 ml full. Both methods should not return any value. Initially set LiquidLevel to 200. In the Main method create an object of class Glass and read commands from the screen until the user terminates the program (see next). Don't forget to refill the glass when needed!

Task - 04:

Create a class called Employee that includes three pieces of information as instance variables—a first name (type String), a last name (type String) and a monthly salary (double). If the monthly salary is not positive, set it to 0.0. Write a test application named EmployeeTest that demonstrates class Employee's capabilities. Create two Employee objects and display each object's yearly salary. Then give each Employee a 10% raise and display each Employee's yearly salary again.

Task - 05:

- Create a class called Book to represent a book. A Book should include four pieces of information as instance variables—a book name, an ISBN number, an author name and a publisher. Provide methods (query method) for each instance variable. In addition, provide a method named getBookInfo that returns the description of the book as a

String (the description should include all the information about the book). You should use this keyword in member methods and constructor. Write a test application named BookTest to create an array of object for 5 elements for class Book to demonstrate the class Book's capabilities.

Use accessor and mutator in this question.