Lesson Plan

JAVA PROGRAMMING LAB

ETCS-357

S .No.	Topic Covered	List of Experiments
Lab1	Basic concept of Java programming, Compilation and Execution Process,Data Types, operators, Reading user input, Strings	1. Write a program to print "Hello World" on the screen. 2. WAP that convert string to character using toString() and valueOf() . 3. WAP that convert Char to string 4. Program to find ASCII code of a character 5. Swapping two numbers using bitwise operator
Lab2	Java Control statements, Command line arguments	1. WAP to check Vowel or Consonant using Switch Case 2. WAP to display first n prime numbers. 3. WAP to check whether the input year is leap or not 4. Write an application that accepts two doubles as its command line arguments, multiple these together and display the product. 5. Write an application that accepts one command line argument, display the line of reporting if number is even or odd. 6. Write an application that accepts radius of a circle as its command line argument display the area.
Lab3	Arrays, Methods, Method Overloading	1. Write a program to find out the array index or position where sum of numbers preceeding the index is equals to sum of numbers succeeding the index. 2. Write a program that creates and initializes a four-element int array. Calculate and display the average of its values. 3. WAP using Bubble sort for sorting in ascending Order. 4. Create a java program to implement stack and queue concept 5. Using the concept of method overloading Write method for calculating the area of triangle ,circle and rectangle.

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Lab4	Classes & object Constructor	1. WAP that creates a class circle with instance variables for the centre and the radius. Initialize and display its variables. 2. Modify experiment 1 to have a constructor in class circle to initialize its variables. 3. 3.Modify experiment 2 to show constructor overloading. 4. WAP to display the use of this keyword. 5. Write a program that can count the number of instances created for the class. 6. Java Program to get the cube of a given number using the static method 7. WAP that describes a class person. It should have instance variables to record name, age and salary. Create a person object. Set and display its instance variables.
Lab5	Inheritance , Polymorphism , Method overriding	1. WAP that implements method overriding 2. WAP to illustrate simple inheritance. 3. WAP to illustrate multilevel inheritance. 4. WAP illustrating all uses of super keywords
Lab6	Abstract classes , Interface, Package	1. Create an abstract class shape. Let rectangle and triangle inherit this shape class. Add necessary functions. 2. Write a java package to show dynamic polymorphism and interfaces. 3. Write an application that creates an 'interface' and implements it. 4. Write an application to illustrate Interface Inheritance.
Lab7	Exception Handling, Applet	1. Write an application that shows how to create a user-defined exception. 2. Create a customized exception and also make use of all the 5 exception keywords. 3. Write an Applet that displays "Hello World" (Background color-black, text color-blue and your name in the status window.) 4. Develop an analog clock using applet.

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Lab8	Multithreading	1. Write a java program to show multithreaded producer and consumer application. 2. Write an application that executes two threads. One thread displays "An" every 1000 milliseconds and other displays "B" every 3000 milliseconds. Create the threads by extending the Thread class..
Lab9	AWT Components Event Handling	1. WAP that illustrates how to process mouse click, enter, exit, press and release events. The background color changes when the mouse is entered, clicked, pressed, released or exited. 2. WAP that displays your name whenever the mouse is clicked.
Lab10	File Handling, JDBC	1. Write a program that read from a file and write to file. 2. Convert the content of a given file into the uppercase content of the same file. 3. JDBC (Database connectivity with MS-Acces)
Lab11	Swings	1. Create runnable jar file in java. 2. Display image on a button in swing 3. Change the component color by choosing a color from ColorChooser 4. Display the digital watch in swing tutorial 5. Create a notepad in swing
Lab12	Servlet	1. Write hello world program in servlet 2. Write a servlet which displays current system date and time? 3. Write a program that handle HTTP request. 4. Write a program that handle HTTP response 5. Create a servlet that uses Cookies to store the number of times a user has visited your servlet.

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