Lab Plan

Name of the Course : OOPM(Java) Lab (CSL304)
Year/Sem/Class : S.E.(Comp) / Sem III / D7-A/B/C

Sr. No.	Topic	CO Mapping
1.	**Program on Various ways to accept data through keyboard and unsigned right shift operator** **1. Input through Command Line Argument** a) To demonstrate the concept of arithmetic operators. b) List the subjects offered to you in sem III **2. Input through Scanner Class** a) Print the Fibonacci series upto the nth term taking the value of n from the user. **b)** WAP to reverse the four digit no**.** **3. Unsigned right shift operator** a) Demonstrate the working of right shift operator.	**CO1**
2.	**Program On Branching ,Looping, Labelled break and continue** **1. Branching** a. WAP to print the roots of quadratic equation. b. WAP to check if the entered no. is a prime no. or not. **c.** WAP to demonstrate the working of types of operators (Bitwise, Logical and relational) using switch case**.** **2. Looping** a. WAP to print the patterns. b. WAP to print all the three digit Armstrong nos. **3. Labelled break & continue** a. WAP to demonstrate the working of labelled break and continue.	**CO1**
3.	**Program on Arrays** **1.1D Arrays** a. To search an given element in the Array. **b.** To merge two arrays**.** **2.2D arrays** a. To check if the entered matrix is symmetric or not. b. To perform Matrix Multiplication **c.** To find out trace and Norm of a particular Matrix**.**	**CO3**
4.	**Program on Strings & String buffer** a. Reverse the string and decide whether it is palindrome or not b. Capitalize the first letter of each word c. Count the frequency of particular letter and replace that particular letter by # d. Count the no. of uppercase, lowercase, blank spaces, digits, special characters from string	**CO3**

5.	**Program on Vector.** a. WAP to add n Strings in a vector array. Input new String and check whether it is present in the vector. If it is present delete it otherwise add it to the vector b. WAP to test whether the given element is present in the vector or not. **c.** WAP to find the frequency of an element in given vector array	**CO3**
6.	**Program to create class with members and methods, accept and display details for single object.** a. Define a class to represent a bank account. Include the following members: name of the depositor, account number, type of account balance amount in the account Methods: 1.to assign initial values 2.to deposit an amount 3.to withdraw an amount after checking balance. 4.to display the name & balance	**CO2**
7.	**Demonstrate the concept of constructor and constructor overloading**	**CO2**
8.	**Program on method overloading** a. Consider a class Figure and overload the function called area() to display the area of figures like square, triangle, Rectangle and circle.	**CO2**
9.	**Program on passing object as argument and returning object**	**CO2**
10.	**Program on creating user defined package**	**CO2**
11.	**Program on Single and Multilevel inheritance(Use super Keyword)**	**CO4**
12.	**Program on Abstract classes**	**CO4**
13.	**Program on interfaces** WAP to Create **an interface** Area & implement the same in different classes Rectangle ,circle ,triangle	**CO4**
14.	**Program on Dynamic method dispatch using base class and interface reference**	**CO4**
15.	**Exception Handling** a. Program to demonstrate try, catch, throw, throws and finally b. WAP to demonstrate the concept of multiple catch statements **c.** WAP to calculate the Result. It should consist of name , seatno. date, center no. and marks of three semester. Create a user defined Exception class MarksOutOfBoundsException, If entered marks of any subject is greater than 100 or less than 0 then program should create a user defined Exception of type MarksOutOfBoundsException and must have a provision to handle it.	**CO5**
17.	**Program on Multithreading** a. WAP to print the table of 5,7,13 using Multithreading(Use thread class) b. WAP to print first 20 prime nos. and 15 fibonacci terms and also print the total time taken by each thread for the execution **c.** Program on concept of synchronization	**CO5**
18.	**Program on Applet** **1. To demonstrate Graphics, Font and Color class**	**CO6**

	a. House b. Traffic Signal c. Joker face **2. Passing Parameters to applets**	
19.	**Program to create GUI Applications** 1. Create Registration form using AWT. **2.** Take a Login and Password from the user and display it on third Text field which appears only on clicking OK button and clear both the text Fields on clicking RESET button perform same using AWT.	**CO6**
20.	**Database Connectivity(JDBC)**	**CO6**
21.	**Mini Project based on concept of the syllabus.**	**CO1,CO2, CO3,CO4, CO5,CO6**