**Tentative Lab List**

**Adavnced Java**

1. **Multithreading** :

Create multithreading application by Implementing the Runnable Interface and Thread priority. Also Apply Thread Prevention Methods.

1. **Networking**:
2. Create chat application using Connection-oriented communication.
3. Demonstrate Connection less communication using **DatagramSocket**
4. **SERVLET JSP JSTL**
5. Write a servlet program that takes your name and address from an HTML Form and displays it.
6. Write a servlet program that displays current date and time.
7. Implement a JAVA Servlet Program to implement a dynamic HTML using Servlet (user name and password should be accepted using HTML and displayed using a Servlet).
8. Design a JAVA JSP Program to implement verification of a particular user login and display a welcome page. (Use/Apply Scriplet, Expression and Declarative JSP Tags)
9. Create HttpServlet (GET) to check voting eligibility.
10. Create HttpServlet Servlet (POST) to count the number of visitors to a web page
11. Create Menu Driven Program to demonstrate all servlet types.
12. Perform/Implement Session Tracking with Cookies Handling by taking a application (Read and Delete Cookies)
13. Perform/Implement Session Tracking with URL Rewriting by taking a application
14. Demonstrate/Apply JSTL Core Tags (Min 7) by taking a application
15. Demonstrate/Apply JSTL Function Tags (Min 7) by taking a application
16. Demonstrate/Apply JSTL SQL Tags (Min 7) by taking a application
17. **Apply Hibernate Annotations** – Create table by using Hibernate Annotations (Apply min 10 Annotations as per your requirement) Take in following input from user through console (EmployeeID, EmployeeName, EmployeePost, EmployeeJoiningDate, EmployeeExperience) and store in the database(Mysql)
18. **HQL Queries -** Create table Book\_Info by using Hibernate Annotations. Store some record through program or manually. By using HQL queries select the records and print on the console.
19. **Create Spring MVC application** to print student mark sheet – Take in following input from user-Student Name, Class and Course wise Marks. Calculate Percentage/CGPA, Pass/Fail and print the result in mark sheet. Create Professional Mark sheet. (Database connection not Mandatory)
20. **Create Desktop/Console Spring ORM Application (**Menu Driven –Insert/Delete/updates/read) Take the following input from user- (CarID, CarName, Year\_of\_Manufacture , Color , Qty) and use database (mysql).
21. **Spring AOP** – Demostrate Spring AOP in a application.