## **FACULTY OF TECHNOLOGY**



Department of Computer Engineering 01CE0411-Advance Java Technology- Lab Manual

## **List of Experiments**

Lab	Program
1.	Make a table in database using following schema:
	emp(id int primary key, name varchar(50), city varchar(50), age int)
	Create the emp table given above and write JDBC application for using
	a) Statement object to get all employee records.
	b) PreparedStatement object to insert a record of an employee.
2.	Create the emp table as given above and write JDBC application for using the object
	of CallableStatement to get city of entered employee id.
3.	Create GUI of Registration Form using swing and Event Handling taking place
	including validating each field.
4.	Create GUI using Swing which will interact with Database and insert the content in
	the database.
5.	Using Servlets, create a login form and perform state management using HttpSession.
	Create an HTML page for Login purpose. Forward the user to profile servlet page if
	login is successful otherwise include the login page in the output. Use hard-coded
	strings to check the user login credentials.
6.	Using Servlets, create a login form and perform state management using HttpSession
	by using database connectivity to check the user login credentials.
7.	Perform exception handling in Servlets for a Login application using web.xml file. Also
	implement a class named ErrorHandlerServlet which will handle any exceptions
	generated during the login process.
8.	Perform exception handling using JSP.
	a) Create a JSP page to get input as two numbers a, b from user.
	b) Provide buttons for addition, subtraction, multiplication and division on the
	same page.
	c) Create a JSP page for performing all the operations and displaying the result.
	d) Create an exception handling JSP page for handling any exceptions.
9.	Make use of the following types of Tags available in JSTL Taglibs as a part of JSP
	programs.
	a) Core: c:out, c:set, c:remove, and c:import tags.
	b) Function: fn:toLowerCase, fn:toUpperCase, fn:substring, and fn:replace tags.
10.	Make use of the following types of Tags available in JSTL Taglibs as a part of JSP
	programs.
	a) Format: fmt:formatDate, fmt:parseDate and fmt:setTimeZone tags.
	b) XML: x:parse, x:forEach and x:out tags.
11.	Implement Hibernate annotations.
	a) Create an Employee class and map it to a table in the database by annotations
	b) Perform the following operations on the Employee table
	a. Adding a new employee
	b. Deleting an existing employee
	c. Updating the salary of a given employee by 10%.
12.	Modify the above experiment by implementing the HQL for all the operations.
13.	Create a Java application to make use of Dependency injection using Setter methods.
14.	Create a Java application to make use of Dependency injection using Constructor.