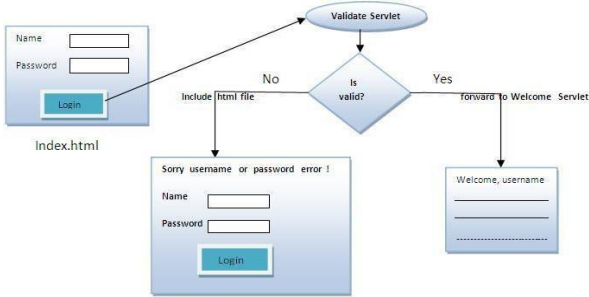


Lab	Aim	Hours
1	Introduction to IDE and JDBC <ol style="list-style-type: none"> Create a Java application consisting of the following components: <ol style="list-style-type: none"> Student class with private data members: int id, String name, double cpi. Default constructor, parameterized constructor, getter-setter methods and toString method. DemoStudent class has main method to create various Student objects <ul style="list-style-type: none"> Using command-line-argument Taking input from user at runtime Write a Java application to create table, to store and fetch student registration information (like firstName, lastName, branch, username and password) from database using JDBC. (Using Statement object) 	2
2	Working with JDBC and Servlets <ol style="list-style-type: none"> Write a Java application to fetch records of student registration and practice the use of the following methods of ResultSet interface: absolute(), afterLast(), beforeFirst(), first(), isFirst(), isLast(), last(), previous(), next(), relative() Write a servlet that displays a hello message on the browser. Understanding java Servlet life cycle. Use deployment descriptor file. 	2
3	Working with Servlets <ol style="list-style-type: none"> Write a servlet to display the initialization (servlet and context) parameters. Write a servlet to display the request headers. Write a servlet which registers and displays the number of hits made by clients since that servlet has been deployed. 	2
4	Working with Servlets (delegating the request) and JSP <p>Write a Java web application for a login module which contains the following components:</p> <p>.index.html : for getting input from the user.</p> <p>.ValidateServlet.java : a servlet class for validating the user. If it is a valid user (validate from database using PreparedStatement), it will forward the request to the welcome servlet. If user is not validated then it displays Error message along with the response from index.html.</p> <p>.WelcomeServlet.java : a servlet class for displaying the welcome message.</p>  <p>Write a Java web application to search a word or phrase on Google search engine. The application should have following components:</p> <p>.Search.html: It contains a textbox to accept search word or phrase from user.</p> <p>.SearchOnGoogleServlet.java: It should redirect the search query to Google search engine.</p> <p>Write a Java web application to demonstrate usage of JSP Scripting Elements (Scriptlet, Expression, Declaration) and JSP implicit objects (out, request, response.)</p> <p>Use method post to submit a feedback form (html) (Full Name, Email, Subject, Message) to a jsp page and let jsp page preview the same as confirmation page with additional text "Feedback received. Thank you."</p>	2
5	Working with Servlets and JSP <p>Write a web based Java application which allows the user to download a file from the list of</p>	2

	<p>available files. The application has two components as follow:</p> <p>.FileList.html: It displays a list of files to the user to choose a file to download.</p> <p>.FileDownloadServlet: It takes the user’s choice for a file to be downloaded and sends that file in response to the user.</p> <p>.Given a design goal below, write a web based application using the following standard actions: jsp:useBean (with attributes: ‘id’, ‘scope’, ‘type’, and ‘class’), jsp:getProperty to display final results.</p> <p>Components identified as follow.: Movie.java, Genre.html, ControllerServlet and DisplayMovieList.jsp</p> <p>.Movie.java provides a bean/class data members, accessors, mutators, toString, default and parameterized constructor as required.</p> <p>.Genre.html provides a list of movie genres to the user to choose from. Send the chosen genre as request parameter to ControllerServlet.</p> <p>.ControllerServlet contains a list of movies according to genre. Set a request scope attribute “mymovies” with the array of movies of the chosen genre. Forward the request to DisplayMovieList.jsp</p> <p>.DisplayMovieList.jsp displays the names of movies by getting them from the attribute “mymovies”.</p>	
6	<p>Working with JSP and Listeners</p> <ol style="list-style-type: none">1. Write a web based java application containing a JSP which performs the simple arithmetic calculation for given arguments and operator. Write your JSP code using jsp:useBean action tag.2. Write a web based Java application which registers and displays the number of hits made by clients since that application has been started by container. [Use ServletContextListener].3. Write a web based Java application which logs the request creation and its destruction.	2
7	<p>Working with HttpSession</p> <p>Write a Java web application using HttpSession which allows only logged in user to access the other servlets of the application. Write the following components:</p> <ul style="list-style-type: none">• Login.html allows user to provide username and password and send them as request parameters to LoginVerifierServlet.• LoginVerifierServlet takes username and password from login.html and verifies it. If credentials are correct then it creates a session. It displays welcome message along with username and links to first.jsp and second.jsp.• first.jsp and second.jsp display some random messages and can be accessed if user is logged in. (you should delegate to Login.html if the user is not logged in)	2