Ex.No: 6: Programs using Java Servlets

a. Write a Generic Servlet program using Java Servlet to print the message -"HELLO WORLD" in the Servlet window.

b. Write a Servlet program to demonstrate Http Get Request that retrieves the content (XHTML document) of a specified URL. When the user clicks the Get HTML Document button of Welcome.html, a get request is sent to the servlet WelcomeServlet.java. The servlet responds to the request by generating dynamically an XHTML document for the client that displays " Welcome to Servlets ! ".

c. Design an HTML Form that consists of the following fields and a SUBMIT button.

Emp Name	Emp ID	DOB
Department	Salary	Email ID

Write a Generic Servlet Program to retrieve all the Form Parameter Names and their corresponding values and display them in the Servlet window.

d. Design an HTML Form that consists of the following options in a Drop-down List and a SUBMIT button.

Red Green Blue

Write a Servlet Program using Http Servlet to retrieve the selected option from the drop-down list (use doGet( ) method) and display it in the Servlet window.

e. Create a Web application that allows the user to select a favorite programming language and post the choice to the server. The response is a Web page in which the user can select another favorite language or click a link to view a list of book recommendations. When the user selects the list of book recommendations, a get request is sent to the server. The cookies previously stored on the client are read by the servlet and used to form a Web page containing the book recommendations. CookieServlet.java handles both the get and the post requests. The CookieSelectLanguage.html document contains four radio buttons (**C**, **C++**, **Java** and **VB 6**) and a **Submit** button. When the user presses **Submit**, the **CookieServlet** is invoked with a **post** request. The servlet adds a cookie containing the selected language to the response header and sends an XHTML document to the client. Each time the user clicks **Submit**, a cookie is sent to the client.

f. Create a Web application for dynamic FAQs. The application should obtain the information to create the dynamic FAQ Web page from a database that consists of a Topics table and an FAQ table. The Topics table should have two fields—a unique integer ID for each topic (topicID) and a name for each topic (topicName). The FAQ table should have three fields—the topicID (a foreign key), a string representing the question (question) and the answer to the question (answer). When the servlet is invoked, it should read the data from the database and return a dynamically createdWeb page containing each question and answer, sorted by topic.

g. Create a Web application to demonstrate basic session-tracking techniques, in that the servlet use HttpSession objects. Once again, the servlet handles both get and post requests. The document SessionSelectLanguage.html contains four radio buttons (C, C++, Java and VB 6) and a Submit button. When the user presses Submit, SessionServlet.java is invoked with a post request. The servlet responds by creating an object of type HttpSession for the client (or using an existing session for the client) and adds the selected language and an ISBN number for the recommended book to the HttpSession object. Then, the servlet sends an XHTML page to the client. The display information contains Session information such as Session ID, Whether new or old session, creation time, last accessed time and maximum inactivate interval. Each time the user clicks Submit, a new language/ISBN pair is added to the HttpSession object.

h. The SurveyServlet.java and the Survey.html document demonstrate a three-tier distributed application that displays the user interface in a browser using XHTML. The middle tier is a Java servlet that handles requests from the client browser and provides access to the third tier—a Cloudscape database accessed via JDBC. The servlet in this example is a survey servlet that allows users to vote for their favorite animal. The document Survey.html contains five radio buttons (Dog, Cat, Parrot, Cow and None) and a Submit button. When the servlet receives a post request from the Survey.html document, the servlet updates the total number of votes for that animal in the database and returns a dynamically generated XHTML document containing the survey results to the client. The result should display the number of responses and vote percentage for each pet. Also display the total number of responses obtained.

i. Design an HTML Form that consists of the following Checkbox options and a SUBMIT button.

☐ Apple ☐ Orange ☐ Grapes ☐ Mango ☐ Lemon

Write a Servlet Program using Http Servlet to retrieve the selected options

(use doPost( ) method) and display them in the Servlet window.
