



Advanced Java (Servlets & JSP) Assignments

Topics: Basics of Servlet

- **Problem #1:** Write a servlet which will display the count of number of times a client has accessed it.
- **Problem #2:** Write a servlet to print the current date and time.
- **Problem #3:** Create a MVC application using Servlet, JSP and plain old java class.
- **Problem #4:** Write a servlet that will take a string and show its reverse
- **Problem #5:** Write a Servlet application that allows you to add new movies to an array list and lists all the movies.

Topics: Session Tracking

- **Problem #6:** Create a login page using html and write a servlet program to explain session tracking with the help of HttpSession.
- **Problem #7:** Create a login page using HTML and write a Java program to track the session with the help of cookies.
- **Problem #8:** Write a servlet program to do the following:
 - Get user ID and password parameters from Login.html file and it to the cookies object.
 - Retrieve these set cookies and verify the user validity from the table (Assume suitable table structure)
- **Problem #9:** Suppose your system needs to be secure. Only people that know the password are allowed to see any part of it. As is, almost any page can be loaded if a hacker guesses the right URL.
 - Each servlet hides behind the servlet server so that a hacker can only view what the servlet decides to show.
 - We could put a password on every request page, but if we're doing a lot of work, that can get old in a hurry.
 - We need to arrange our app such that the user provides the password once and can then use the pages as much as she likes without providing it again. There's more than one way to do this.

Topics: Creating a data access object

- **Problem #10:** Write a servlet program for accepting registration details of a singer for singing competition and store in the database table and if the record already exists, display appropriate message.
- **Problem #11:** Create a servlet which does online shopping for books having the following functionality:
 - Add items to the shopping cart
 - Delete items from the shopping cart
 - Display selected items
- **Problem #12:** Create a HTML form as below and store the data in the database through the html form and further retrieve the data via form (Why don't we give our feedback form here?)
- **Problem #13:** Write a program using servlet, JDBC to read employee id and display the information from database like employee name, address, cell-no, dob, doj, salary and display a message "employee not exist" if employee id is not present in database?
- **Problem #14:** Write a program to develop an online application for purchase Laptop using servlet and JDBC
- **Problem #15:** Make an Excel spreadsheet where each entry is a random number. Use Internet Explorer to access it if you don't have the MS Office plugin in Netscape.

Topics: Servlet Config/Servlet

- **Problem #16:** Write a program to get the init parameter values from web.xml file.
- **Problem #17:** Write a program to define the application context parameter and print it on the browser.
- **Problem #18:** Write a program to display multiple values from single parameter?

Topics: JSP

- **Problem #19:** Make an HTML form page that sends 3 parameters to a JSP page for display.
- **Problem #20:** Make a JSP page that makes a bulleted list with a random number of entries in the list, each of which is a random int.
- **Problem #21:** Make a JSP page that always displays the same page content, but uses a background colour of green, red, blue, or yellow, randomly chosen for each request. Make sure your page does not use the JSP-Styles style sheet, since that style sheet overrides the background colour.
- **Problem #22:** The java.math package has a class called BigInteger that lets you create whole numbers with an arbitrary number of digits. Create a JSP page that makes a large BigInteger from a String you supply as a request parameter, squares it, and prints out the result.
- **Problem #23:** The include Action. Make a JSP 'signature block' page with your name and email address. Include it in another JSP page. The value of the page attribute of jsp:include is allowed to be a JSP expression. Make a JSP page that includes a 'good news' page or a 'bad news' page at random.