

Differentiate between the Session Bean and Entity Bean

	Session Bean	Entity Bean
Purpose	Represent business logic	Represent data entities
State	Stateless or stateful	Stateful
Scope	Single client	Multiple clients
Persistence	Non persistent	Persistent
Activation	Activated by client request	Activated by container
Primary Key	Absent	Present
Span	Short lived	Long lived
Recovery	Not recoverable	Recoverable

Write a HTML based Program to accept the values for userID and password. Apply appropriate JavaScript validations

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8">
  <title>Login Form</title>
</head>
<body>

<div>
  <h2>Login Form</h2>
  <form id="loginForm" onsubmit="return validateForm()">
    <label for="userID">User ID:</label>
    <input type="text" id="userID" name="userID" required>

    <label for="password">Password:</label>
    <input type="password" id="password" name="password" required>

    <div id="error-message"></div>

    <button type="submit">Login</button>
  </form>
</div>

<script>
  function validateForm() {
    // Get values from form
    var userID = document.getElementById('userID').value;
    var password = document.getElementById('password').value;

    // Reset error message
    document.getElementById('error-message').innerHTML = '';

    if (userID.trim() === '' || password.trim() === '') {
      document.getElementById('error-message').innerHTML = 'User ID and
Password are required';
    }
  }
}
```

```
        return false;
    }

    return true;
}
</script>

</body>
</html>
```

Write an HTML based program to design a website for educational institution. Assume appropriate links/hyperlinks. (website should contain one homepage and two reference pages)

index.html

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="UTF-8">
    <title>University Homepage</title>
    <link rel="stylesheet" type="text/css" href="styles.css">
</head>
<body>

<header>
    <h1>University Name</h1>
</header>

<nav>
    <a href="index.html">Home</a>
    <a href="courses.html">Courses</a>
    <a href="admissions.html">Admissions</a>
</nav>

<section>
    <h2>Welcome to Our University!</h2>
    <p>Join us as soon as possible</p>
</section>

<footer>
    &copy; 2023 All rights reserved.
</footer>

</body>
</html>
```

style.css

```
body {
    font-family: Arial, sans-serif;
    margin: 0;
    padding: 0;
    background-color: #f4f4f4;
}

header {
    background-color: #333;
    color: white;
    padding: 10px;
    text-align: center;
}

nav {
    background-color: #444;
    padding: 10px;
}

nav a {
    color: white;
    text-decoration: none;
    padding: 10px;
    margin: 0 10px;
}

section {
    padding: 20px;
}

footer {
    background-color: #333;
    color: white;
    text-align: center;
    padding: 10px;
    position: fixed;
    width: 100%;
}
```

Write a JDBC based Program to dynamically update the salary of employee from 10.000 to Rs 33,000 and his address from NOIDA to DELHI in the employee table of the database. Assume appropriate fields of the employee table.

```
import java.sql.*;

public class UpdateEmployee {

    public static void main(String[] args) throws Exception {
        // Database connection details
        String url = "jdbc:mysql://localhost:3306/your_database_name";
        String username = "your_username";
```

```

String password = "your_password";

// Employee ID and updated information
int employeeId = 1; // Replace with actual employee ID
double newSalary = 33000.00;
String newAddress = "DELHI";

// Connect to the database
Connection conn = DriverManager.getConnection(url, username, password);

// Prepare SQL statement
String sql = "UPDATE employee SET salary = ?, address = ? WHERE id = ?";

// Create a PreparedStatement object
PreparedStatement statement = conn.prepareStatement(sql);

// Set statement parameters
statement.setDouble(1, newSalary);
statement.setString(2, newAddress);
statement.setInt(3, employeeId);

// Execute the update statement
statement.executeUpdate();

// Close connection and statement
statement.close();
conn.close();
}
}

```

Write a Servlet based program to display all the values of HTTP Request header packet

```

import java.io.*;
import javax.servlet.*;
public class HeaderServlet extends HttpServlet {

    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse
response) throws ServletException, IOException {
        response.setContentType("text/plain");

        // Get all header names
        Enumeration<String> headerNames = request.getHeaderNames();

        // Iterate through each header name and print its value
        while (headerNames.hasMoreElements()) {
            String headerName = headerNames.nextElement();
            String headerValue = request.getHeader(headerName);
            response.getWriter().println(String.format("%s: %s", headerName,
headerValue));
        }
    }
}

```