

**Develop a data driven servlet application for user authentication.
Also display header values of request object and response object.**

LoginForm.java

```
<!DOCTYPE html>

<html>

<body>

    <h2>Login Form</h2>

    <form action="Authenticate" method="post">

        <label for="username">Username:</label>

        <input type="text" id="username" name="username"
required><br>

        <label for="password">Password:</label>

        <input type="password" id="password" name="password"
required><br>

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

    </form>

</body>

</html>
```

AuthenticateServlet.java

```
package in.ga.backend;
```

```
import java.io.*;
```

```
import java.sql.*;
```

```
import jakarta.servlet.ServletException;
import jakarta.servlet.annotation.WebServlet;
import jakarta.servlet.http.*;

@WebServlet("/Authenticate")

public class AuthenticateServlet extends HttpServlet {

    private static final long serialVersionUID = 1L;

    protected void doPost(HttpServletRequest request,
        HttpServletResponse response) throws ServletException,
        IOException {

        response.setContentType("text/html");

        PrintWriter out = response.getWriter();

        String username = request.getParameter("username");
        String password = request.getParameter("password");

        boolean isAuthenticated = false;

        try {

            Class.forName("com.mysql.cj.jdbc.Driver");

            Connection conn =
                DriverManager.getConnection("jdbc:mysql://localhost:3306/servlets",
                    "root", "Gaurav@123");
```

```
String sql = "SELECT * FROM users WHERE username = ?  
AND password = ?";
```

```
PreparedStatement pstmt = conn.prepareStatement(sql);  
pstmt.setString(1, username);  
pstmt.setString(2, password);
```

```
ResultSet rs = pstmt.executeQuery();  
isAuthenticated = rs.next();
```

```
conn.close();  
} catch (Exception e) {  
    e.printStackTrace();  
}
```

```
if (isAuthenticated) {  
    out.println("<h1>Welcome, " + username + "!</h1>");  
} else {  
    out.println("<h1>Invalid username or password!</h1>");  
}
```

```
out.println("<h2>Request Headers:</h2>");
```

```
request.getHeaderNames().asIterator().forEachRemaining(headerName -> {
```

```
        out.println(headerName + ": " +  
request.getHeader(headerName) + "<br>");  
    });
```

```
        response.addHeader("Custom-Header", "This is gaurav and i am  
your header");
```

```
        out.println("<h2>Response Headers:</h2>");
```

```
        response.getHeaderNames().forEach(headerName -> {
```

```
            out.println(headerName + ": " +  
response.getHeader(headerName) + "<br>");  
        });
```

```
        out.close();
```

```
    }
```

```
}
```