

## **Practical No. 11**

**Objective:** Make a JSP application which should connect to the table in the MySQL database and it should insert, update and delete data in this table.

**Theory:**

MySQL Enterprise Edition includes the most comprehensive set of advanced features, management tools and technical support to achieve the highest levels of MySQL scalability, security, reliability, and uptime. It reduces the risk, cost, and complexity in developing, deploying, and managing business-critical MySQL applications.

**Source Code:**

### **index.html**

```
<html>
  <body>
    <form method="post" action="insert.jsp">
      Name:<br>
      <input type="text" name="name">
      <br>
      Branch:<br>
      <input type="text" name="branch">
      <br>
      Percentage:<br>
      <input type="text" name="percentage">

      <br>
      Email Id:<br>
      <input type="email" name="email">
      <br><br>
      <input type="submit" value="insert">
    </form>

    <form method="post" action="update.jsp">
      Name:<br>
      <input type="text" name="name">
      <br>
      Branch:<br>
      <input type="text" name="branch">
      <br>
      Percentage:<br>
      <input type="text" name="percentage">
      <br>
      Email Id:<br>
      <input type="email" name="email">
      <br><br>
```

```

<input type="submit" value="update">      </form>

<form method="post" action="delete.jsp">
    Name:<br>
    <input type="text" name="name">
    <br><br>
    <input type="submit" value="delete">
</form>
</body>
</html>

```

### insert.jsp

```

<%@page import="java.sql.SQLException"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="java.sql.DriverManager"%>
<%@page import="java.sql.PreparedStatement"%>
<%@page import="java.sql.Connection"%>
<%!String name;%>
<%!String branch;%>
<%!String percentage;%>

<%!String email;%>
<%!String JDBC_Driver_1 = "com.mysql.jdbc.Driver";%><%!String
DB_URL = "jdbc:mysql://localhost/test";%><%!String USER =
"root";%><%!String PASS = "srijan";%>
<%!Connection conn;%>
<%!PreparedStatement ps;%>
<%
    name=request.getParameter("name");
    branch=request.getParameter("branch");
    percentage=request.getParameter("percentage");
    email=request.getParameter("email");

    String JDBC_Driver_1 = "com.mysql.jdbc.Driver";
    String DB_URL = "jdbc:mysql://localhost/test";
    String USER = "root";
    String PASS = "srijan";
    Connection conn;
    PreparedStatement ps;

```

```

try
{
try {

    Class.forName(JDBC_Driver_1);
}
catch(ClassNotFoundException e) {
    System.out.println(e);

}

System.out.println("Connection to a selected Database");
conn = DriverManager.getConnection(DB_URL,USER,PASS);
System.out.println("Connected database successfully");
System.out.println("Creating a statement");
String sql = "insert
test.student(Name,Branch,Percentage,Email)+"values(?,?,?,?,?)";
ps = conn.prepareStatement(sql); ps.setString(1,name);
ps.setString(2,branch); ps.setString(3,percentage);
ps.setString(4,email); int i = ps.executeUpdate(); into
System.out.println("No. of rows affected: "+i);
ps.close(); conn.close();

}

catch(SQLException e) {
    System.out.println(e);
}

%>
Inserted<br>
<button onclick="goBack()">Go Back</button>
<script> function
goBack() {
window.history.back();
}
</script>

```

### update.jsp

```

<%@page import="java.sql.SQLException"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="java.sql.DriverManager"%>
<%@page import="java.sql.PreparedStatement"%>
<%@page import="java.sql.Connection"%>
<%!String name;%>

```

```

<%!String branch;%>
<%!String percentage;%>
<%!String email;%>
<%!String JDBC_Driver_1 = "com.mysql.jdbc.Driver";%><%!String
DB_URL = "jdbc:mysql://localhost/test";%> <%!String USER =
"root";%> <%!String PASS = "srijan";%>
<%!Connection conn;%>
<%!PreparedStatement ps;%>
<%
    name=request.getParameter("name");
    branch=request.getParameter("branch");
    percentage=request.getParameter("percentage");
    email=request.getParameter("email");
    String JDBC_Driver_1 = "com.mysql.jdbc.Driver";
    String DB_URL = "jdbc:mysql://localhost/test";
    String USER = "root";
    String PASS = "srijan";
    Connection conn;
    PreparedStatement ps;

    try {
        try {
            Class.forName(JDBC_Driver_1);
        }
        catch(ClassNotFoundException e) {
            System.out.println(e);
        }
        System.out.println("Connection to a selected Database");
        conn = DriverManager.getConnection(DB_URL,USER,PASS);
        System.out.println("Connected database successfully");
        System.out.println("Creating a statement");
        String sql = "UPDATE test.student SET branch=?, percentage=?,email=? WHERE
name=?;";
        ps = conn.prepareStatement(sql);

        ps.setString(4,name);
        ps.setString(1,branch);
        ps.setString(2,percentage);
        ps.setString(3,email);
        ps.executeUpdate();

        int i =
        System.out.println("No. of rows affected: "+i);
        ps.close();
        conn.close();
    }
    catch(SQLException e) {
        System.out.println(e);
    }
}

```

```

        }
%>
Updated<br>
<button onclick="goBack()">Go Back</button>
<script> function
goBack() {
window.history.back();
}
</script>

```

### delete.jsp

```

<%@page import="java.sql.SQLException"%>
<%@page import="java.sql.ResultSet"%>
<%@page import="java.sql.DriverManager"%>

<%@page import="java.sql.PreparedStatement"%> <
%>@page import="java.sql.Connection">%> <%!String name;
<%!String JDBC_Driver_1 = "com.mysql.jdbc.Driver";%><%!String
DB_URL = "jdbc:mysql://localhost/test";%><%!String USER =
"root";%><%!String PASS = "srijan";%>

<%!Connection conn;%>
<%!PreparedStatement ps;%>
<%
    name=request.getParameter("name");
    String JDBC_Driver_1 = "com.mysql.jdbc.Driver";
    String DB_URL = "jdbc:mysql://localhost/test";
    String USER = "root";
    String PASS = "srijan";
    Connection conn;
    PreparedStatement ps;
    try {
try {
    Class.forName(JDBC_Driver_1);

}
catch(ClassNotFoundException e) {
    System.out.println(e);
}

System.out.println("Connection to a selected Database");
conn = DriverManager.getConnection(DB_URL,USER,PASS);
System.out.println("Connected database successfully");

System.out.println("Creating a statement"); String sql =
"delete from test.student where Name=?"; ps =
conn.prepareStatement(sql);

ps.setString(1,name); int i = ps.executeUpdate();
System.out.println("No. of rows affected: "+i); ps.close();
conn.close(); %

```

```

        catch(SQLException e) {
            System.out.println(e);
        }
    %>
Deleted<br>
<button onclick="goBack()">Go Back</button>

<script>
function goBack() {
    window.history.back();
}</script>

```

**Output:**

The image contains two screenshots of a web browser window. Both screenshots show the URL `http://localhost:8080/JSP_DB/index.jsp`.  
**Left Screenshot (Input):**  
 - Title bar: `localhost`  
 - Form fields:  
 - Name: User  
 - Branch: B.Tech CSE  
 - Percentage: 75  
 - Email Id: user@example.com  
 - Buttons: insert  
  
**Right Screenshot (Output):**  
 - Title bar: `localhost`  
 - Message: Inserted  
 - Button: Go Back

**Result:** The given program has been compiled and executed successfully.