PRACTICAL 6(A) – JSP TELEPHONE DIRECTORY

AIM

To design and develop a Telephone Directory web application using JSP and database connectivity.

SOFTWARE REQUIREMENTS

• NetBeans IDE 7.x
• JDK 7 or 8
• Apache Tomcat 7.x
• MySQL Database

THEORY

JavaServer Pages (JSP) is a server-side technology used to create dynamic web applications. In this practical, JSP is used along with JDBC to store and retrieve telephone directory records from a relational database.

DATABASE DESIGN

Database Name: telephonedb
Table Name: contacts
Fields: id (INT, PK), name (VARCHAR), phone (VARCHAR), email (VARCHAR), address (VARCHAR)

SOURCE CODE – index.jsp

```
<html>
<body>
<h2>Add Contact</h2>
<form action="addContact.jsp" method="post">
Name: <input type="text" name="name"><br><br>
Phone: <input type="text" name="phone"><br><br>
Email: <input type="text" name="email"><br><br>
Address: <input type="text" name="address"><br><br>
<input type="submit" value="Save">
</form>
<a href="viewContacts.jsp">View Contacts</a>
</body>
</html>
```

SOURCE CODE – addContact.jsp

```
<%@ page import="java.sql.*" %>
<%
String name = request.getParameter("name");
String phone = request.getParameter("phone");
String email = request.getParameter("email");
```

```
String address = request.getParameter("address");

Class.forName("com.mysql.jdbc.Driver");
Connection con = DriverManager.getConnection(
"jdbc:mysql://localhost:3306/telephonedb","root","");

PreparedStatement ps = con.prepareStatement(
"insert into contacts(name,phone,email,address) values(?,?,?,?)");

ps.setString(1,name);
ps.setString(2,phone);
ps.setString(3,email);
ps.setString(4,address);

ps.executeUpdate();
out.println("Contact Saved Successfully");
%>
```

SOURCE CODE – viewContacts.jsp

```
<%@ page import="java.sql.*" %>
<%
Class.forName("com.mysql.jdbc.Driver");
Connection con = DriverManager.getConnection(
"jdbc:mysql://localhost:3306/telephonedb","root","");

Statement st = con.createStatement();
ResultSet rs = st.executeQuery("select * from contacts");

while(rs.next()){
out.println(rs.getInt(1)+" "+rs.getString(2)+" "+rs.getString(3)+"<br>");
}
%>
```

NETBEANS 7 – DETAILED EXECUTION STEPS

1. Open NetBeans IDE 7
2. File → New Project → Java Web → Web Application
3. Project Name: TelephoneDirectory
4. Server: Apache Tomcat
5. Finish
6. Create JSP files inside Web Pages
7. Add MySQL Connector JAR to Libraries
8. Create database and table in MySQL
9. Run project using Run → Run Project

RESULT

Thus, Telephone Directory web application using JSP and database was successfully implemented.