Practical 6
StudentInfoServlet.java :-

```java
package com.studentinfo;
import javax.servlet.*;
import javax.servlet.http.*;
import java.io.*;
import java.sql.*;
import java.util.*;

public class StudentInfoServlet extends HttpServlet {

    private static final String JDBC_URL = "jdbc:mysql://localhost:3306/student_db?serverTimezone=UTC";
    private static final String JDBC_USER = "root";
    private static final String JDBC_PASSWORD = "pratik";

    protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException,
IOException {
        List<Student> students = new ArrayList<>();

        try {
            // Load the MySQL JDBC Driver (optional for modern versions)
            Class.forName("com.mysql.cj.jdbc.Driver");

            try (Connection conn = DriverManager.getConnection(JDBC_URL, JDBC_USER, JDBC_PASSWORD);
                Statement stmt = conn.createStatement();
                ResultSet rs = stmt.executeQuery("SELECT * FROM students_info")) {

                while (rs.next()) {
                    int studId = rs.getInt("stud_id");
                    String studName = rs.getString("stud_name");
                    String className = rs.getString("class");
                    String division = rs.getString("division");
                    String city = rs.getString("city");

                    students.add(new Student(studId, studName, className, division, city));
                }

                // Set the list of students as a request attribute
                request.setAttribute("students", students);

                // Forward the request to the JSP page
                RequestDispatcher dispatcher = request.getRequestDispatcher("/students_info.jsp");
                dispatcher.forward(request, response);
            }

        } catch (SQLException | ClassNotFoundException e) {
            e.printStackTrace();
            response.getWriter().println("Error: " + e.getMessage());
        }
    }
}
```

Student.java (DAO Class) :-

```java
package com.studentinfo;

public class Student {
    private int studId;
    private String studName;
    private String className;
    private String division;
    private String city;

    public Student(int studId, String studName, String className, String division, String city) {
        this.studId = studId;
        this.studName = studName;
        this.className = className;
        this.division = division;
        this.city = city;
    }

    public int getStudId() {
        return studId;
    }

    public String getStudName() {
        return studName;
    }

    public String getClassName() {
        return className;
    }

    public String getDivision() {
        return division;
    }

    public String getCity() {
        return city;
    }
}
```

web.xml :-

```xml
<web-app xmlns="http://java.sun.com/xml/ns/javaee" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://java.sun.com/xml/ns/javaee http://java.sun.com/xml/ns/javaee/web-app_4_0.xsd"
        version="4.0">

    <servlet>
        <servlet-name>StudentInfoServlet</servlet-name>
        <servlet-class>com.studentinfo.StudentInfoServlet</servlet-class>
    </servlet>

    <servlet-mapping>
        <servlet-name>StudentInfoServlet</servlet-name>
        <url-pattern>/studentInfo</url-pattern>
    </servlet-mapping>

</web-app>
```

students_info.jsp :-

```jsp
<%@ page import="java.util.List" %>
<%@ page import="com.studentinfo.Student" %>
<%@ page contentType="text/html;charset=UTF-8" %>
<html>
<head>
    <title>Student Information</title>
    <style>
        table {
            width: 80%;
            margin: 20px auto;
            border-collapse: collapse;
        }
        th, td {
            padding: 10px;
            text-align: center;
            border: 1px solid #ccc;
        }
        th {
            background-color: #f2f2f2;
        }
    </style>
</head>
<body>
    <h2 style="text-align:center;">Student Information</h2>

    <table>
        <tr>
            <th>Student ID</th>
            <th>Student Name</th>
            <th>Class</th>
            <th>Division</th>
            <th>City</th>
        </tr>

        <%
            // Get the list of students from the request
            List<Student> students = (List<Student>) request.getAttribute("students");

            if (students != null && !students.isEmpty()) {
                // Iterate over the list and display each student's details
                for (Student student : students) {
        %>
            <tr>
                <td><%= student.getStudId() %></td>
                <td><%= student.getStudName() %></td>
                <td><%= student.getClassName() %></td>
                <td><%= student.getDivision() %></td>
                <td><%= student.getCity() %></td>
            </tr>
        <%
                }
            } else {
                out.println("<tr><td colspan='5'>No student data found.</td></tr>");
            }
        %>
    </table>
```
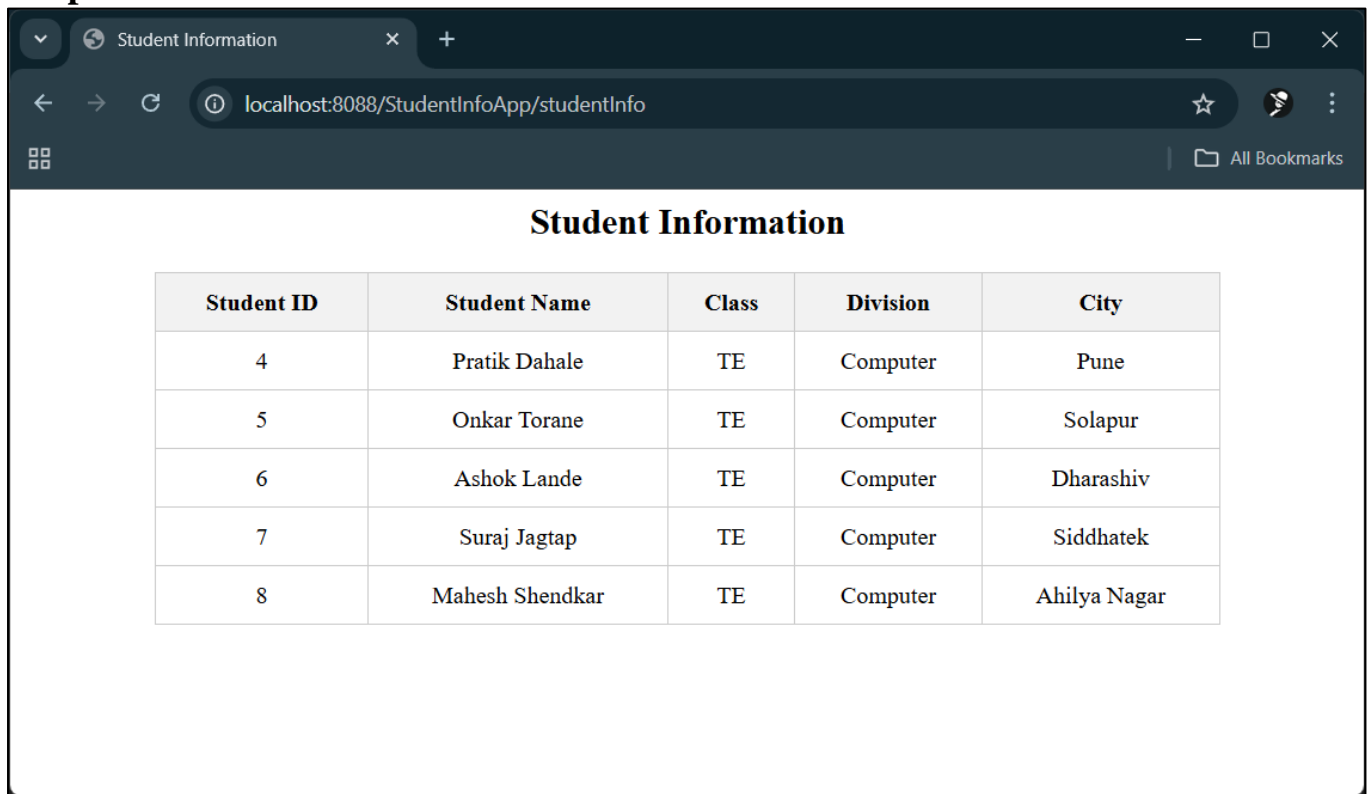
```
</body>
</html>
```

Output :-

Students_info Table in Database :-