**Modern Education Society’s**

**College of Engineering, Pune**

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| **NAME OF STUDENT: CLASS:** |
| **SEMESTER/YEAR: ROLL NO:** |
| **DATE OF PERFORMANCE: DATE OF SUBMISSION:** |
| **EXAMINED BY: EXPERIMENT NO: 05** |

**TITLE:** Add dynamic web application essence using servlet.

**PROBLEM STATEMENT:** Implement the sample program demonstrating the use of Servlet.

### **OBJECTIVES:**

1. Understand basic concepts of Servlet.
2. Use of mysql.

### **OUTCOMES:**

1. To create servlet.
2. Connect servlet to database.

**PRE-REQUISITES:**

* 1. Knowledge of editor,browser.
  2. Knowledge of Database

**APPARATUS:**

Computer Machine, Browser, Code Editor, etc

**QUESTIONS:**

1. What is Servlet? Explain how a servlet is processed.

2. Why session management is required in Servlet?

3. Explain servlet lifecycle.

**Code:**

**Files Structure:**

practical 5

└───WEB-INF

│───web.xml

└───classes

│───MyServlet.class

└───MyServlet.java

**Web.xml**

<?xml version="1.0" encoding="UTF-8"?>

<web-app>

  <servlet>

    <servlet-name>MyServlet</servlet-name>

    <servlet-class>MyServlet</servlet-class>

  </servlet>

  <servlet-mapping>

    <servlet-name>MyServlet</servlet-name>

    <url-pattern>/</url-pattern>

  </servlet-mapping>

</web-app>

**MyServlet.java**

import java.io.\*;

import javax.servlet.\*;

import javax.servlet.http.\*;

import java.sql.\*;

public class MyServlet extends HttpServlet {

    public void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

        response.setContentType("text/html");

        PrintWriter out = response.getWriter();

        try {

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

            Connection con = DriverManager.getConnection("jdbc:mysql://localhost:3306/college", "root", "");

            Statement stmt = con.createStatement();

            ResultSet rs = stmt.executeQuery("select \* from books");

            out.println("<!DOCTYPE html>");

            out.println("<html lang='en'>");

            out.println("<head>");

            out.println("<meta charset='UTF-8'>");

            out.println("<meta name='viewport' content='width=device-width, initial-scale=1.0'>");

            out.println("<title>Practical 5 - WTL</title>");

            out.println(

                    "<link href='https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css' rel='stylesheet'>");

            out.println("</head>");

            out.println("<body style='padding: 5rem;'>");

            out.println("<h1 class='center'>Practical 5</h1>");

            out.println("<h2 class='center'>Display Data Of Books From Mysql Database</h2>");

            out.println("<table class='table'>");

            out.println("<thead>");

            out.println("<tr>");

            out.println("<th scope='col'>Book ID</th>");

            out.println("<th scope='col'>Title</th>");

            out.println("<th scope='col'>Author</th>");

            out.println("<th scope='col'>Price</th>");

            out.println("<th scope='col'>Quantity</th>");

            out.println("</tr>");

            out.println("</thead>");

            out.println("<tbody>");

            while (rs.next()) {

                out.println("<tr>");

                out.println("<th scope='row'>" + rs.getString(1) + "</th>");

                out.println("<td>" + rs.getString(2) + "</td>");

                out.println("<td>" + rs.getString(3) + "</td>");

                out.println("<td>" + rs.getString(4) + "</td>");

                out.println("<td>" + rs.getString(5) + "</td>");

                out.println("</tr>");

            }

            out.println("</tbody>");

            out.println("</table>");

            out.println(

                    "<script src='https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js'></script>");

            out.println("</body>");

            out.println("</html>");

            con.close();

        } catch (Exception e) {

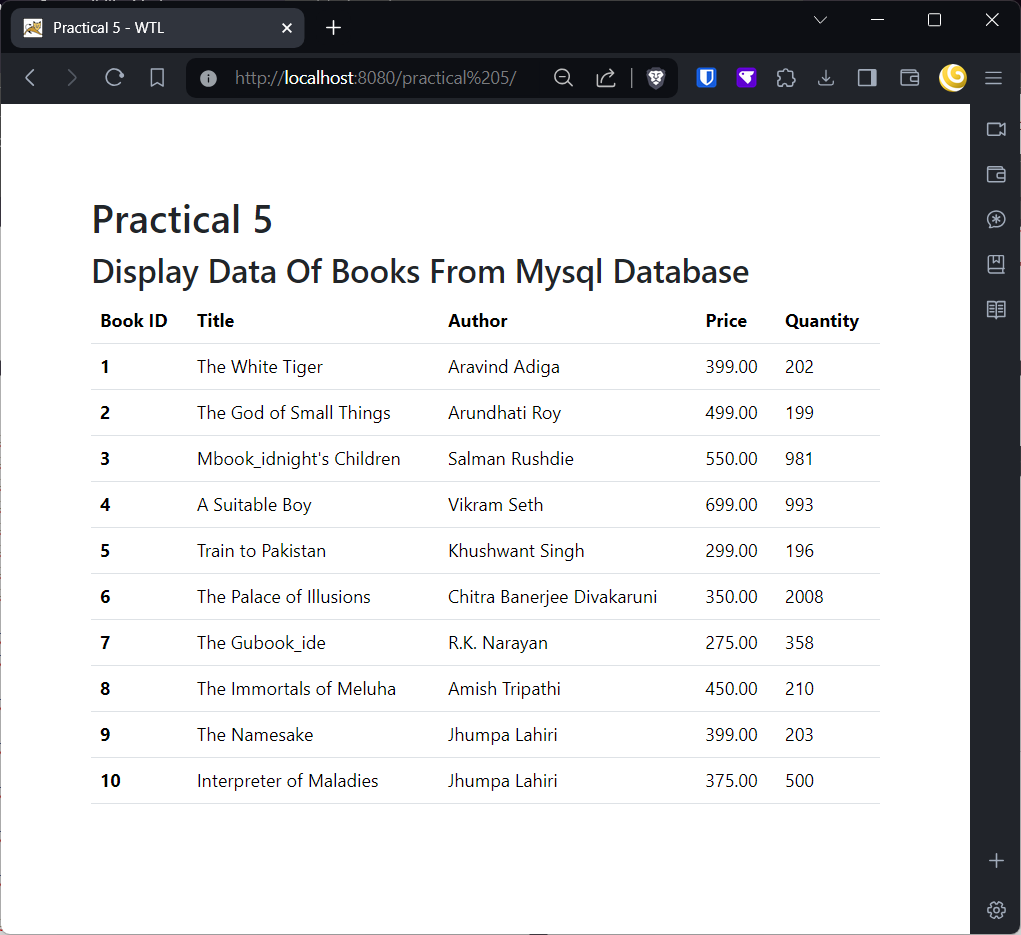
            out.println(e);

        }

    }

}

**Output:**

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