Step1::

package myservlet;

import java.io.File;

import java.io.IOException;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.SQLException;

import java.sql.Statement;

import java.util.Scanner;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/\*\*

\* Servlet implementation class ImportRecords

\*/

@WebServlet("/import\_Records")

public class Import\_Records extends HttpServlet {

private static final long serialVersionUID = 1L;

public Connection con = null;

public void init() {

try {

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

String dburl = "jdbc:mysql://localhost:3306/a2\_sharmistha";

String uid = "root";

String password = "";

con = DriverManager.getConnection(dburl, uid, password);

System.out.println(con.isClosed() ? "connection not established" : "connected");

String sql = "Truncate emp;";

try {

Statement st = con.createStatement();

st.executeUpdate(sql);

} catch (SQLException e) {

e.printStackTrace();

}

} catch (Exception e) {

e.printStackTrace();

}

}

public Import\_Records() {

super();

}

/\*\*

\* @see HttpServlet#doGet(HttpServletreq req, HttpServletres res)

\*/

protected void doGet(HttpServletRequest req, HttpServletResponse res) throws ServletException, IOException {

String sql = "INSERT INTO emp(EmpNo, EmpName, Department, EmpJob) VALUES ";

Scanner sc = new Scanner(

new File("C:\\Users\\Sharmistha\\eclipse-workspace\\Assignment2\\src\\main\\resources\\importrecord.csv"));

sc.useDelimiter(","); // sets the delimiter pattern

while (sc.hasNext()) // returns a boolean value

{

sql += "(";

sql += "'" + sc.next() + "',";

sql += "'" + sc.next() + "',";

sql += "'" + sc.next() + "',";

sql += "'" + sc.next() + "'";

sql += "),";

}

sql = (sql.substring(0, sql.length() - 1));

sql += ";";

try {

Statement st = con.createStatement();

st.executeUpdate(sql);

} catch (SQLException e) {

e.printStackTrace();

}

sc.close(); // closes the scanner

}

/\*\*

\* @see HttpServlet#doPost(HttpServletreq req, HttpServletres res)

\*/

protected void doPost(HttpServletRequest req, HttpServletResponse res) throws ServletException, IOException {

doGet(req, res);

}

}

Graphical user interface, text, application

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Step2::

package myservlet;

import java.io.File;

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/\*\*

\* Servlet implementation class ShowRecords

\*/

@WebServlet("/Show\_records")

public class Show\_record extends HttpServlet {

private static final long serialVersionUID = 1L;

public Connection con = null;

public void init() {

try {

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

String dburl = "jdbc:mysql://localhost:3306/a2\_sharmistha";

String uid = "root";

String password = "";

con = DriverManager.getConnection(dburl, uid, password);

System.out.println(con.isClosed() ? "connection not established" : "connected");

} catch (Exception e) {

e.printStackTrace();

}

}

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public Show\_record() {

super();

}

/\*\*

\* @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse

\* response)

\*/

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

String sql = "SELECT \* FROM emp;";

Statement st;

try {

st = con.createStatement();

ResultSet rs;

rs = st.executeQuery(sql);

while (rs.next()) {

String empNo = rs.getString("EmpNo");

String empName = rs.getString("EmpName");

String department = rs.getString("Department");

String empJob = rs.getString("EmpJob");

PrintWriter out = response.getWriter();

out.println("<html>");

out.println("<head>");

out.println("<title>");

out.println("</title>");

out.println("</head>");

out.println("<body>");

out.println("<h2>Here is the information that you have entered</h2>");

out.println("<fieldset style=\"border: 1px black solid\">");

out.println("<h3>EmployeeNumber is :" +empNo+"</h3><br>");

out.println("<h3>EmployeeName is :" +empName+"</h3><br>");

out.println("<h3>Department is :" +department+"</h3><br>");

out.println("<h3>Employee Job is :" +empJob+"</h3><br>");

out.println("</fieldset>");

out.println("</body>");

out.println("<html>");

}

} catch (SQLException e) {

e.printStackTrace();

}

}

/\*\*

\* @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse

\* response)

\*/

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

doGet(request, response);

}

}

Graphical user interface, text, application, Word

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Step: 4

package myservlet;

import java.io.File;

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.Connection;

import java.sql.DriverManager;

import java.sql.PreparedStatement;

import java.sql.ResultSet;

import java.sql.SQLException;

import java.sql.Statement;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

/\*\*

\* Servlet implementation class ShowRecords

\*/

@WebServlet("/insert\_form\_record")

public class insert\_form\_record extends HttpServlet {

private static final long serialVersionUID = 1L;

public Connection con = null;

public void init() {

try {

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

String dburl = "jdbc:mysql://localhost:3306/a2\_sharmistha";

String uid = "root";

String password = "";

con = DriverManager.getConnection(dburl, uid, password);

System.out.println(con.isClosed() ? "connection not established" : "connected");

} catch (Exception e) {

e.printStackTrace();

}

}

/\*\*

\* @see HttpServlet#HttpServlet()

\*/

public insert\_form\_record() {

super();

}

/\*\*

\* @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse

\* response)

\*/

protected void doGet(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

// TODO Auto-generated method stub

response.sendRedirect("register\_form.html");

}

/\*\*

\* @see HttpServlet#doPost(HttpServletRequest request, HttpServletResponse

\* response)

\*/

protected void doPost(HttpServletRequest request, HttpServletResponse response)

throws ServletException, IOException {

String empNo = request.getParameter("empNo");

String empName = request.getParameter("empName");

String department = request.getParameter("department");

String empjob = request.getParameter("empjob");

String sql = "INSERT INTO emp(EmpNo, EmpName, Department, EmpJob) VALUES (?,?,?,?)";

PreparedStatement ps;

try {

ps = con.prepareStatement(sql);

ps.setString(1, empNo);

ps.setString(2, empName);

ps.setString(3, department);

ps.setString(4, empjob);

ps.executeUpdate();

} catch (SQLException e) {

e.printStackTrace();

}

}

}

Graphical user interface, application

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PART B:

• With batch processing, you can submit a batch of connected SQL statements to the database in a single call. Multiple SQL commands sent to the database simultaneously lower communication costs, which enhances performance.

1. Difference between execute, executeQuery, executeUpdate •
2. The executeQuery function runs statements that pull data from the database and return a result set. It only runs select statements.
3. Executing SQL commands to insert, update, and delete data at the database using the executeUpdate metho