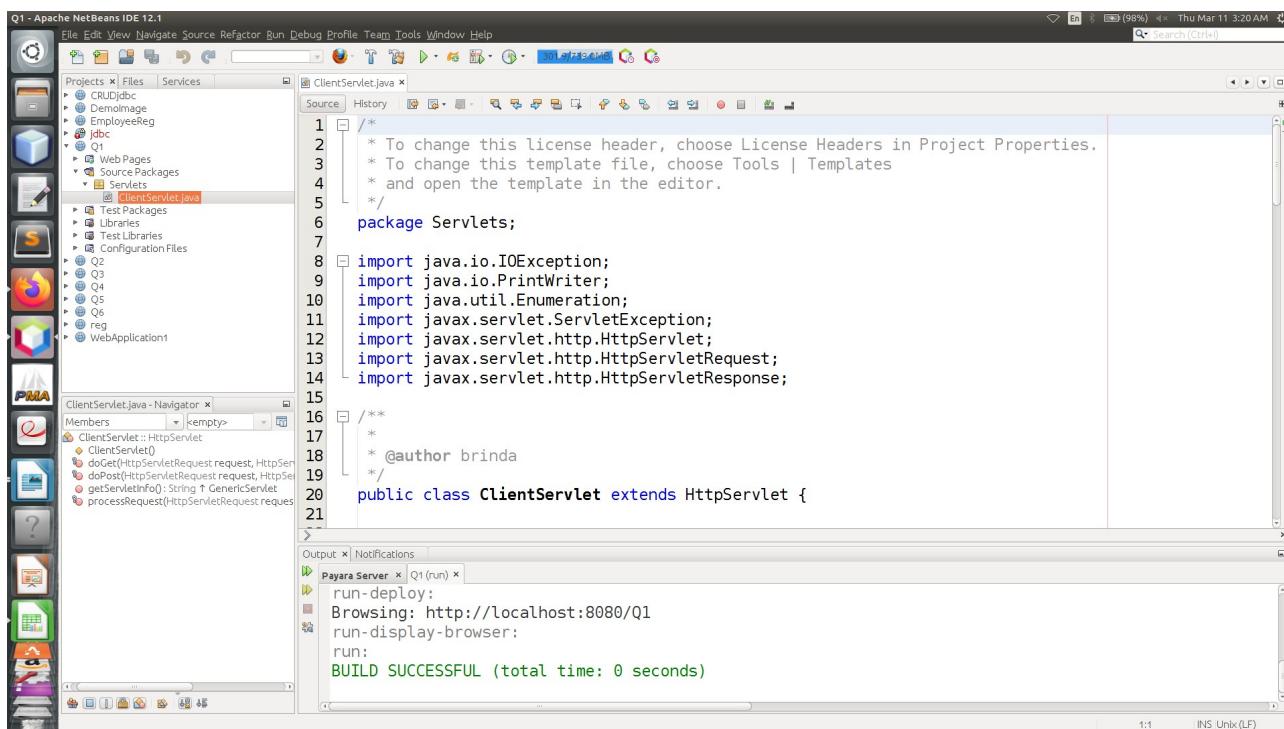


NAME : BRINDA RAYCHA
ROLL NO : 38
ASSIGNMENT – 2 (SERVLETS)
JAVA WEB DEVELOPMENT

Q-1



The screenshot shows the Apache NetBeans IDE interface. The left sidebar displays the project structure under 'Projects' for a 'Web Application' named 'Q1'. The central editor window shows the Java code for 'ClientServlet.java':

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package Servlets;

import java.io.IOException;
import java.io.PrintWriter;
import java.util.Enumeration;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author brinda
 */
public class ClientServlet extends HttpServlet {
```

The 'Output' panel at the bottom shows deployment logs for 'Payara Server' and 'Q1 (run)'. The logs indicate a successful deployment and run:

```
run-deploy:
Browsing: http://localhost:8080/Q1
run-display-browser:
run:
BUILD SUCCESSFUL (total time: 0 seconds)
```

package Servlets;

```
import java.io.IOException;
import java.io.PrintWriter;
import java.util.Enumeration;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
```

```
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author brinda
 */
public class ClientServlet extends HttpServlet {

    protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {

        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet ClientServlet</title>");
        out.println("</head>");
        out.println("<body>");
        out.println("<form>");
        out.println("<table border='1'>");
        out.println("<tr>");
        out.println("<th>"+"NAME"+ "</th>");
        out.println("<th>"+"VALUE"+ "</th>");
        out.println("</tr>");

        Enumeration headerNames = request.getHeaderNames();

        while(headerNames.hasMoreElements()) {
            out.println("<tr>");
            String paramName = (String)headerNames.nextElement();
```

```

        out.print("<td>" + paramName + "</td>");

        String paramValue = request.getHeader(paramName);
        out.println("<td> " + paramValue + "</td>");
        out.println("</tr>");
    }

    out.println("</table>");
    out.println("</form>");

    out.println("<h1>Request URL : " + request.getRequestURI()+
"</h1>");
    out.println("<h1>Is Secure : " + request.isSecure() + "</h1>");

    out.println("<h1>ContextPath : " + request.getContextPath()+
"</h1>");
    out.println("<h1>Host : " + request.getRemoteHost() + "</h1>");
    out.println("<h1>Address : " + request.getRemoteAddr() + "</h1>");
    out.println("<h1>Content Length : " + request.getContentLength()+
"</h1>");
    out.println("<h1>Local Port : " + request.getLocalPort() + "</h1>");
    out.println("<h1>Remote Port : " + request.getRemotePort() +
"</h1>");
    out.println("<h1>HashCode : " + request.hashCode() + "</h1>");

    out.println("<h1>Servlet ClientServlet at " + request.getContextPath()+
"</h1>");
    out.println("</body>");
    out.println("</html>");
}

}

```

@Override

```
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
}

}
```

OUTPUT

The screenshot shows the Mozilla Firefox browser window with the title "Servlet ClientServlet - Mozilla Firefox". The address bar displays "localhost:8080/Q1/ClientServlet". The main content area shows the following information:

NAME	VALUE
host	localhost:8080
user-agent	Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:70.0) Gecko/20100101 Firefox/70.0
accept	text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
accept-language	en-US,en;q=0.5
accept-encoding	gzip, deflate
connection	keep-alive
upgrade-insecure-requests	1

Request URL : /Q1/ClientServlet

Is Secure : false

ContextPath : /Q1

Host : 127.0.0.1

Address : 127.0.0.1

Content Length : -1

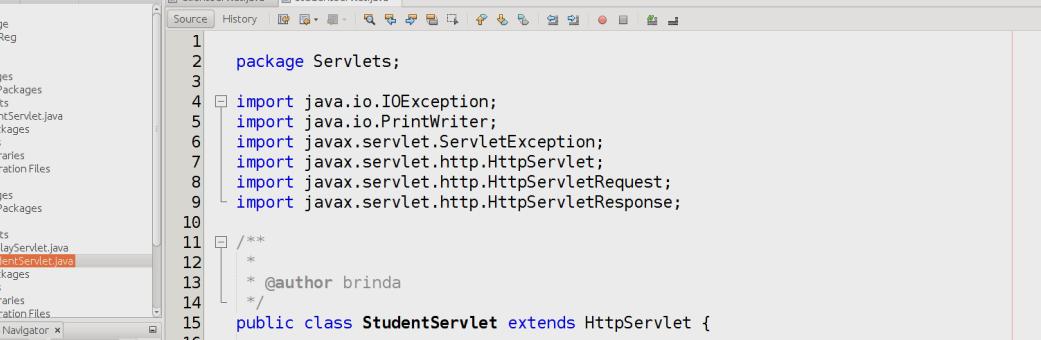
Local Port : 8080

Remote Port : 33772

HashCode : 786438819

Servlet ClientServlet at /Q1

Q-2



The screenshot shows the Apache NetBeans IDE interface with the following details:

- Title Bar:** Q2 - Apache NetBeans IDE 12.1
- Toolbar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Project Explorer (Left):** Shows two projects: Q1 and Q2. Project Q1 contains Web Pages, Source Packages (with Servlets and ClientServlet.java), Test Packages, Libraries, Test Libraries, and Configuration Files. Project Q2 contains Web Pages, Source Packages (with Servlets, DisplayServlet.java, and StudentServlet.java), Test Packages, Libraries, Test Libraries, and Configuration Files.
- Code Editor (Center):** The code for `StudentServlet.java` is displayed. It imports various javax.servlet.* classes and extends HttpServlet. The `processRequest` method retrieves attributes from the request.

```
1 package Servlets;
2
3 import java.io.IOException;
4 import java.io.PrintWriter;
5 import javax.servlet.ServletException;
6 import javax.servlet.http.HttpServlet;
7 import javax.servlet.http.HttpServletRequest;
8 import javax.servlet.http.HttpServletResponse;
9
10 /**
11 * 
12 * @author brinda
13 */
14
15 public class StudentServlet extends HttpServlet {
16
17     protected void processRequest(HttpServletRequest request, HttpServletResponse response)
18         throws ServletException, IOException {
19             response.setContentType("text/html;charset=UTF-8");
20             try (PrintWriter out = response.getWriter()) {
21
22                 String degree_msg=(String)request.getAttribute("degree_msg");
23                 String name_msg = (String)request.getAttribute("name_msg");
24                 String email_msg = (String)request.getAttribute("email_msg");
25                 String mobile_msg = (String)request.getAttribute("mobile_msg");
26                 String hobbie_msg = (String)request.getAttribute("hobbie_msg");
27                 String gender_msg = (String)request.getAttribute("gender_msg");
28
29             }
30         }
31     }
32 }
```

- Navigator (Bottom Left):** Shows the members of `getServletInfo`.
- Status Bar (Bottom Right):** Shows the build number (136:5) and the operating system (INS Unix (LF)).

StudentServlet

```
package Servlets;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author brinda
 */
public class StudentServlet extends HttpServlet {

    protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {

        String degree_msg=(String)request.getAttribute("degree_msg");
        String name_msg = (String)request.getAttribute("name_msg");
        String email_msg = (String)request.getAttribute("email_msg");
        String mobile_msg = (String)request.getAttribute("mobile_msg");
        String hobbie_msg = (String)request.getAttribute("hobbie_msg");
        String gender_msg = (String)request.getAttribute("gender_msg");

        String name = request.getParameter("txtname");
        String mobile = request.getParameter("txtmobile");
        String gender = request.getParameter("gender");
```

```
String degree = request.getParameter("txtdegree");
String email = request.getParameter("txtemail");
String hobbie = request.getParameter("txthobbies");

/* TODO output your page here. You may use following sample
code. */
out.println("<!DOCTYPE html>");
out.println("<html>");
out.println("<head>");
out.println("<title>Servlet StudentServlet</title>");
out.println("</head>");
out.println("<body>");
out.println("<form action='DisplayServlet' method='post'>");
out.println("<table border='1' align='center'>");
out.println("<tr>");
out.println("<td>");

out.println("Name : <input type='text' name='txtname'>");

if(name_msg!=null){
    out.println("<label style=\"color: red\">" + name_msg + "</label> <br>
<br>");}
    out.println("</td>");
    out.println("</tr>");

    out.println("<tr>");
    out.println("<td>"); 
    out.println("Email : <input type='text' name='txtemail' >"); 
    if(email_msg!=null){ 
        out.println("<label style=\"color: red\">" + email_msg + "</label> <br>
<br>");} 
        out.println("</td>"); 
        out.println("</tr>");
```

```

out.println("<tr>");
out.println("<td>");
out.println("Mobile : <input type='text' name='txtmobile' >");
if(mobile_msg!=null){
    out.println("<label style=\"color: red\">" + mobile_msg + "</label>
<br> <br>");}
    }
out.println("</td>");
out.println("</tr>");

out.println("<tr>");
out.println("<td>");
out.println("Degree : <select type='text' name='txtdegree' >");
out.println("<option value='---Select Degree---'>" + " ---Select
Degree---" + "</option>");out.println("<option value='B.Sc.IT'>" + "B.Sc.IT" + "</option>");out.println("<option value='M.Sc.IT'>" + "M.Sc.IT" + "</option>");out.println("<option value='M.Sc.ICT'>" + "M.Sc.ICT" + "</option>");out.println("</select>");if(degree_msg!=null){out.println("<label style=\"color: red\">" + degree_msg + "</label>
<br> <br>");}out.println("</td>");out.println("</tr>");

out.println("<tr>");out.println("<td>");out.println("Gender : <input type='radio' name='gender' value='Male' > Male");out.println("<input type='radio' name='gender' value='Female' > Female");if(gender_msg!=null){

```

```
        out.println("<label style=\"color: red\>" + gender_msg + "</label>");
        <br> <br> );
    }
    out.println("</td>");
    out.println("</tr>");

    out.println("<tr>");
    out.println("<td>");
    out.println("Hobbies : <input type='checkbox' name='txthobbies' value='Reading' > Reading");
    out.println(" <input type='checkbox' name='txthobbies' value='Singing' > Singing");
    out.println(" <input type='checkbox' name='txthobbies' value='Dancing' > Dancing");
    if(hobbie_msg!=null){
        out.println("<label style=\"color: red\>" + hobbie_msg + "</label>");
        <br> <br> );
    }
    out.println("</td>");
    out.println("</tr>");

    out.println("<tr>");
    out.println("<td>");
    out.println(" <input type='submit' value='submit'> ");
    out.println("</td>");

    out.println("</tr>");
    out.println("</table>");
    out.println("</form>");
    out.println("</body>");
    out.println("</html>");

}
}
```

```
@Override  
protected void doGet(HttpServletRequest request, HttpServletResponse  
response)  
    throws ServletException, IOException {  
    processRequest(request, response);  
}  
  
  
@Override  
protected void doPost(HttpServletRequest request, HttpServletResponse  
response)  
    throws ServletException, IOException {  
    processRequest(request, response);  
}  
  
  
@Override  
public String getServletInfo() {  
    return "Short description";  
}  
}
```

DisplayServlet

```
protected void processRequest(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        /* TODO output your page here. You may use following sample code. */
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet DisplayServlet</title>");
        out.println("</head>");
        out.println("<body>");

        String name = request.getParameter("txtname");
        String email = request.getParameter("txtemail");
        String mobile = request.getParameter("txtmobile");
        String degree = request.getParameter("txtdegree");
        String gender = request.getParameter("gender");
        String hobbie[] = request.getParameterValues("txthobbie");

        out.println("<table border='1' align='center'>");
        out.println("<tr><th>" + "Name : " + name + "</th></tr>");
        out.println("<tr><th>" + "Email : " + email + "</th></tr>");
        out.println("<tr><th>" + "Mobile : " + mobile + "</th></tr>");
        out.println("<tr><th>" + "Degree : " + degree + "</th></tr>");
        out.println("<tr><th>" + "Gender : " + gender + "</th></tr>");

    }
}
```

package Servlets;

```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
```

```
/**
```

```
*
```

```
* @author brinda
```

```
*/
```

```
public class DisplayServlet extends HttpServlet {
```

```
    protected void processRequest(HttpServletRequest request,
        HttpServletResponse response)
```

```

    throws ServletException, IOException {
response.setContentType("text/html;charset=UTF-8");
try (PrintWriter out = response.getWriter()) {
    /* TODO output your page here. You may use following sample
code. */
    out.println("<!DOCTYPE html>");
    out.println("<html>");
    out.println("<head>");
    out.println("<title>Servlet DisplayServlet</title>");
    out.println("</head>");
    out.println("<body>");

    String name = request.getParameter("txtname");
    String email = request.getParameter("txtemail");
    String mobile = request.getParameter("txtmobile");
    String degree = request.getParameter("txtdegree");
    String gender = request.getParameter("gender");
    String hobbie[] = request.getParameterValues("txthobbie");

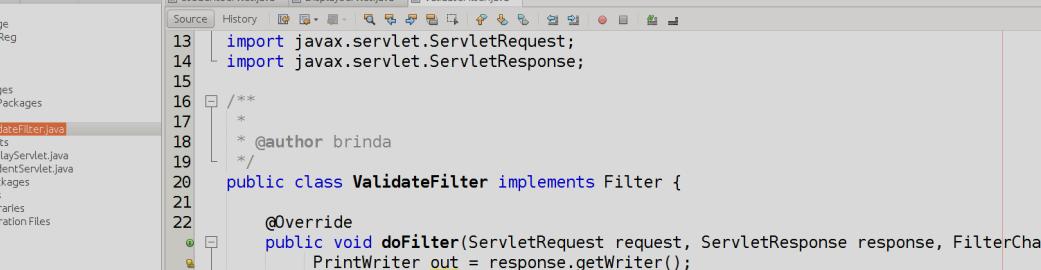
    out.println("<table border='1' align='center'>");
    out.println("<tr><th>" + "Name : " + name + "</th></tr>");
    out.println("<tr><th>" + "Email : " + email + "</th></tr>");
    out.println("<tr><th>" + "Mobile : " + mobile + "</th></tr>");
    out.println("<tr><th>" + "Degree : " + degree + "</th></tr>");
    out.println("<tr><th>" + "Gender : " + gender + "</th></tr>");
    for(int i=0;i<hobbie.length;i++){
        out.println("<tr><th>" + "Hobbies : " + hobbie[i] + "</th></tr>");
    }

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

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

```

```
 @Override  
 protected void doGet(HttpServletRequest request, HttpServletResponse  
 response)  
     throws ServletException, IOException {  
     processRequest(request, response);  
 }  
  
 @Override  
 protected void doPost(HttpServletRequest request, HttpServletResponse  
 response)  
     throws ServletException, IOException {  
     processRequest(request, response);  
 }  
  
 @Override  
 public String getServletInfo() {  
     return "Short description";  
 }  
}
```



The screenshot shows the Apache NetBeans IDE interface with the following details:

- Title Bar:** Q2 - Apache NetBeans IDE 12.1
- Menu Bar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Toolbar:** Standard NetBeans toolbar with icons for file operations.
- Project Explorer (Left):** Shows a project structure with packages like CRUJdbc, Demolimage, EmployeeReg, jdbc, Q1, Q2, Web Pages, and Test Packages. Under Q2, there are Source Packages, Filters (containing ValidateFilter.java), Servlets (containing DisplayServlet.java and StudentServlet.java), Libraries, Test Libraries, and Configuration Files.
- Code Editor (Center):** The main window displays the Java code for `ValidateFilter.java`. The code implements the `Filter` interface and overrides the `doFilter` method. It retrieves parameters from the request and checks if they are empty, setting error messages if necessary.
- Navigator (Bottom Left):** Shows the `doFilter` method and its parameters.
- Status Bar (Bottom):** Shows the current file as `Filters.ValidateFilter > doFilter > if(name.isEmpty()) else if((email.isEmpty())`, along with other status indicators like Payara Server and Q1 (run).

ValidateFilter

package Filters;

```
import java.io.IOException;
import java.io.PrintStream;
import java.io.PrintWriter;
import java.io.StringWriter;
import javax.servlet.Filter;
import javax.servlet.FilterChain;
import javax.servlet.FilterConfig;
import javax.servlet.RequestDispatcher;
import javax.servlet.ServletException;
import javax.servlet.ServletRequest;
import javax.servlet.ServletResponse;
```

```
/*  
 */
```

```
* @author brinda
*/
public class ValidateFilter implements Filter {

    @Override
    public void doFilter(ServletRequest request, ServletResponse response,
FilterChain chain) throws IOException, ServletException {
        PrintWriter out = response.getWriter();

        String degree_msg , email_msg , mobile_msg , hobbie_msg ,
gender_msg = "";
        String degree=request.getParameter("txtdegree");
        String name = request.getParameter("txtname");
        String email = request.getParameter("txtemail");
        String mobile = request.getParameter("txtmobile");
        String gender = request.getParameter("txtgender");
        String hobbie = request.getParameter("txthobbies");

        if(name.isEmpty())
        {
            String name_msg = "name is required";
            request.setAttribute("name_msg", name_msg);

            RequestDispatcher
rd=request.getRequestDispatcher("StudentServlet");
            rd.include(request,response);
        }
        else if(email.isEmpty())
        {
            email_msg = "email is required";
            request.setAttribute("email_msg", email_msg);
            RequestDispatcher rd =
request.getRequestDispatcher("StudentServlet");
        }
    }
}
```

```
    rd.include(request, response);
}
else if(mobile.isEmpty())
{
    mobile_msg = "mobile is required";
    request.setAttribute("mobile_msg", mobile_msg);
    RequestDispatcher rd =
request.getRequestDispatcher("StudentServlet");
    rd.include(request, response);
}
else if(degree.contains("---Select Degree---"))
{
    degree_msg = "Degree is required";
    request.setAttribute("degree_msg", degree_msg);
    RequestDispatcher rd =
request.getRequestDispatcher("StudentServlet");
    rd.include(request, response);
}
else if(gender.isEmpty())
{
    gender_msg = "Gender is required";
    request.setAttribute("gender_msg", gender_msg);

    RequestDispatcher rd =
request.getRequestDispatcher("StudentServlet");
    rd.include(request, response);
}
else if(hobbie.isEmpty() )
{
    hobbie_msg = "Hobbie is required";
    request.setAttribute("hobbie_msg", hobbie_msg);
```

```

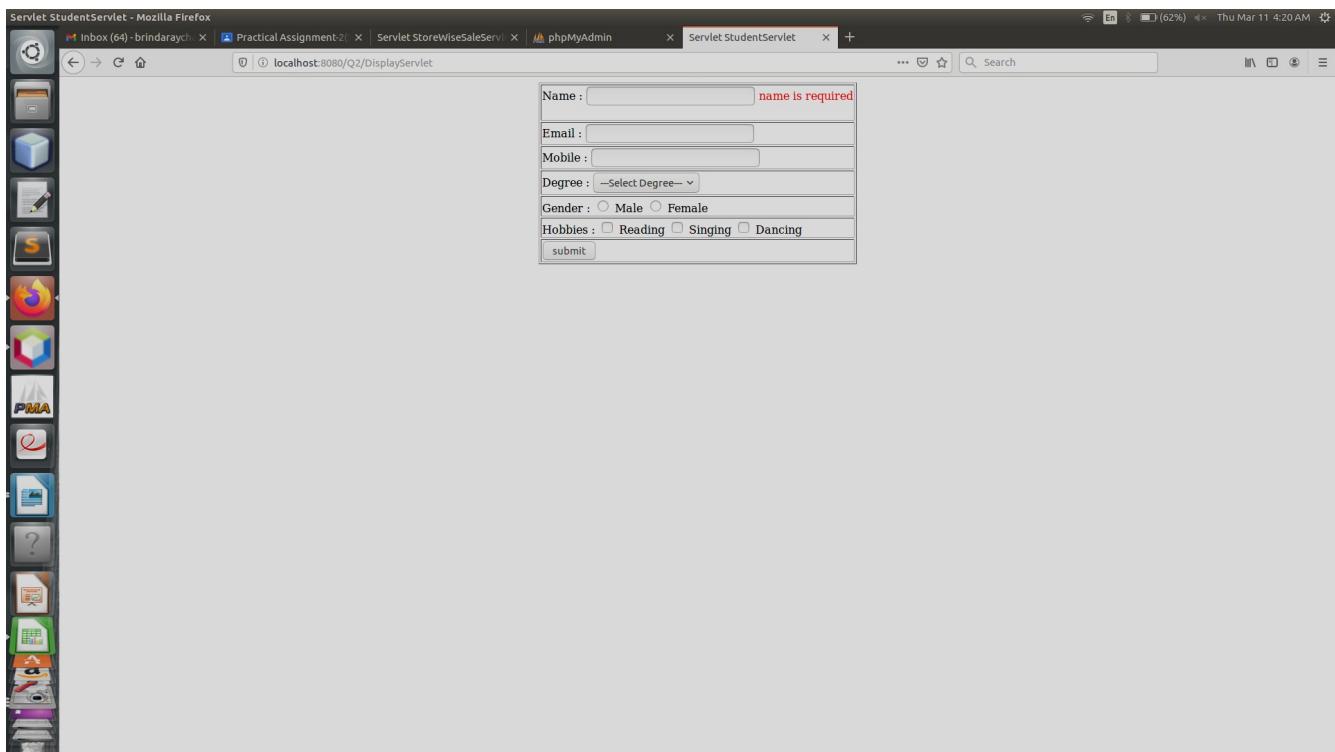
RequestDispatcher rd =
request.getRequestDispatcher("StudentServlet");
    rd.include(request, response);
}

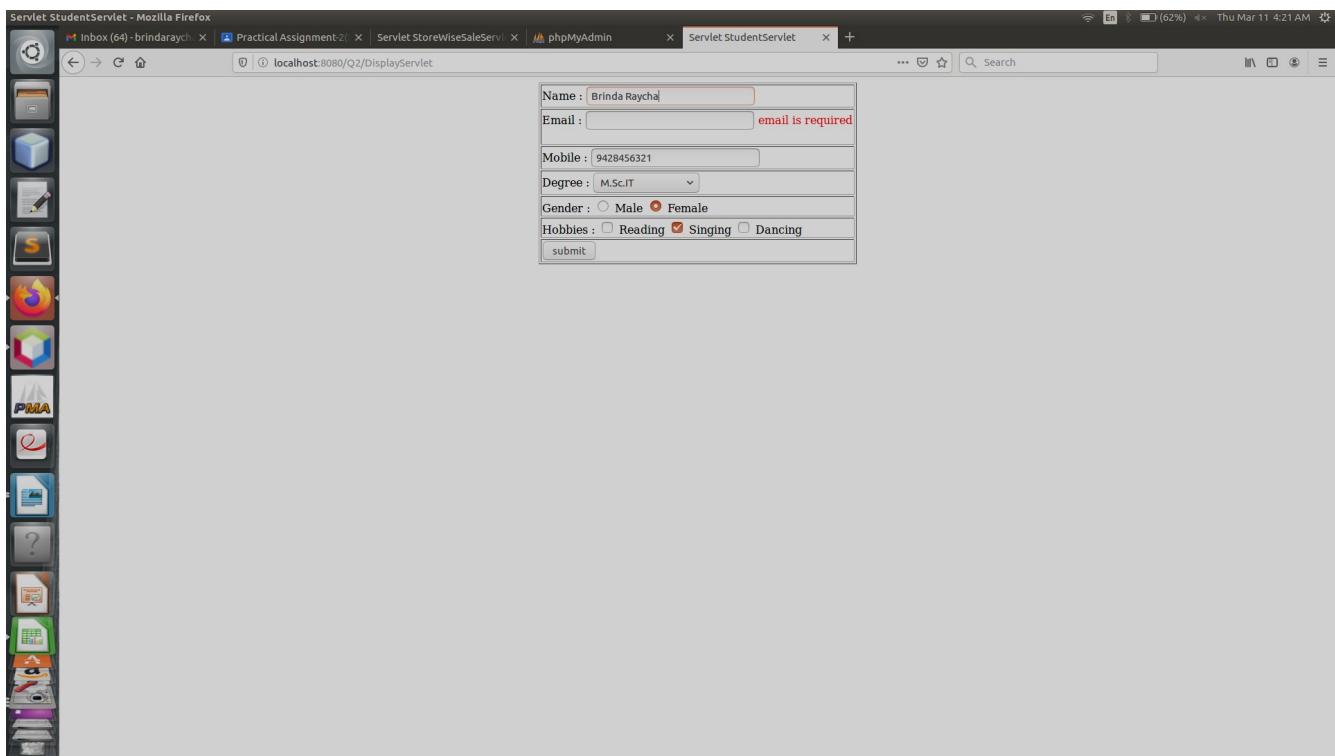
else
{
    RequestDispatcher
rd=request.getRequestDispatcher("DisplayServlet");
    rd.forward(request,response);
    chain.doFilter(request, response);
}
}

}

```

OUTPUT





Q-3

FormServlet

```
package Servlets;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author brinda
 */
```

```
public class FormServlet extends HttpServlet {  
  
    protected void processRequest(HttpServletRequest request,  
HttpServletResponse response)  
        throws ServletException, IOException {  
    response.setContentType("text/html;charset=UTF-8");  
    try (PrintWriter out = response.getWriter()) {  
        /* TODO output your page here. You may use following sample  
code. */  
        out.println("<!DOCTYPE html>");  
        out.println("<html>");  
        out.println("<head>");  
        out.println("<title>Servlet FormServlet</title>");  
        out.println("</head>");  
        out.println("<body>");  
        out.println("<form action='SessionServlet'>");  
        out.println("Name : <input type='text' name='txtname'>");  
        out.println("<input type='submit' value='submit'>");  
        out.println("</form>");  
        out.println("</body>");  
        out.println("</html>");  
    }  
}
```

```
@Override  
protected void doGet(HttpServletRequest request, HttpServletResponse  
response)  
    throws ServletException, IOException {  
    processRequest(request, response);  
}
```

```
@Override
```

```
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
}// </editor-fold>

}
```

SessionServlet

```
package Servlets;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

/**
 *
 * @author brinda
 */
public class SessionServlet extends HttpServlet {
```

```
protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
    throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        /* TODO output your page here. You may use following sample
code. */
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet SessionServlet</title>");
        out.println("</head>");
        out.println("<body>");

        String name = request.getParameter("txtname");
        out.println("<div>Welcome : "+name+"</div>");

        HttpSession session = request.getSession();
        session.setAttribute("SessionName", name);

        out.println("<a href='HomeServlet'>HomeServlet</a>");

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

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}
```

```
    @Override
    protected void doPost(HttpServletRequest request, HttpServletResponse
response)
        throws ServletException, IOException {
        processRequest(request, response);
    }

    @Override
    public String getServletInfo() {
        return "Short description";
    } // </editor-fold>

}
```

HomeServlet

```
package Servlets;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
import javax.servlet.http.HttpSession;

/**
 *
 * @author brinda
 */
public class HomeServlet extends HttpServlet {
```

```
protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
    throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        /* TODO output your page here. You may use following sample
code. */
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet HomeServlet</title>");
        out.println("</head>");
        out.println("<body>");
        HttpSession session = request.getSession(false);
        String userName = (String)session.getAttribute("SessionName");
        out.println("This is Second Page ...Hello User : " + userName);
        out.println("</body>");
        out.println("</html>");
    }
}
```

```
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
```

```
    processRequest(request, response);
}
```

```
@Override
public String getServletInfo() {
    return "Short description";
}// </editor-fold>
```

```
}
```

The screenshot shows the Apache NetBeans IDE interface. The left sidebar displays the project structure under 'Projects'. The main workspace shows the code for `SessionServlet.java`. The code prints an HTML page with a welcome message and session attribute. The output window at the bottom shows the deployment process for 'Payara Server'.

```
out.println("<html>");
out.println("<head>");
out.println("<title>Servlet SessionServlet</title>");
out.println("</head>");
out.println("<body>");

String name = request.getParameter("txtname");
out.println("<div>Welcome : "+name+"</div>");

HttpSession session = request.getSession();

session.setAttribute("SessionName", name);

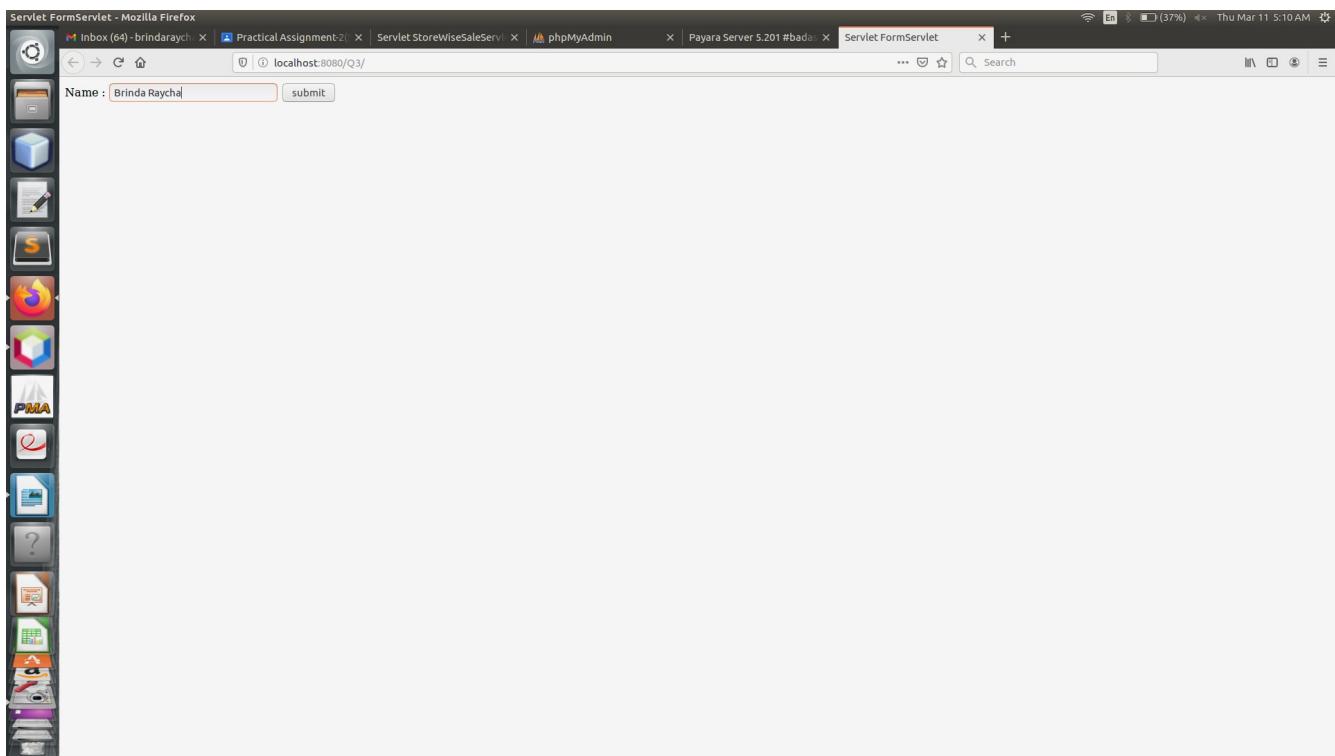
out.println("<a href='HomeServlet'>HomeServlet</a>");

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

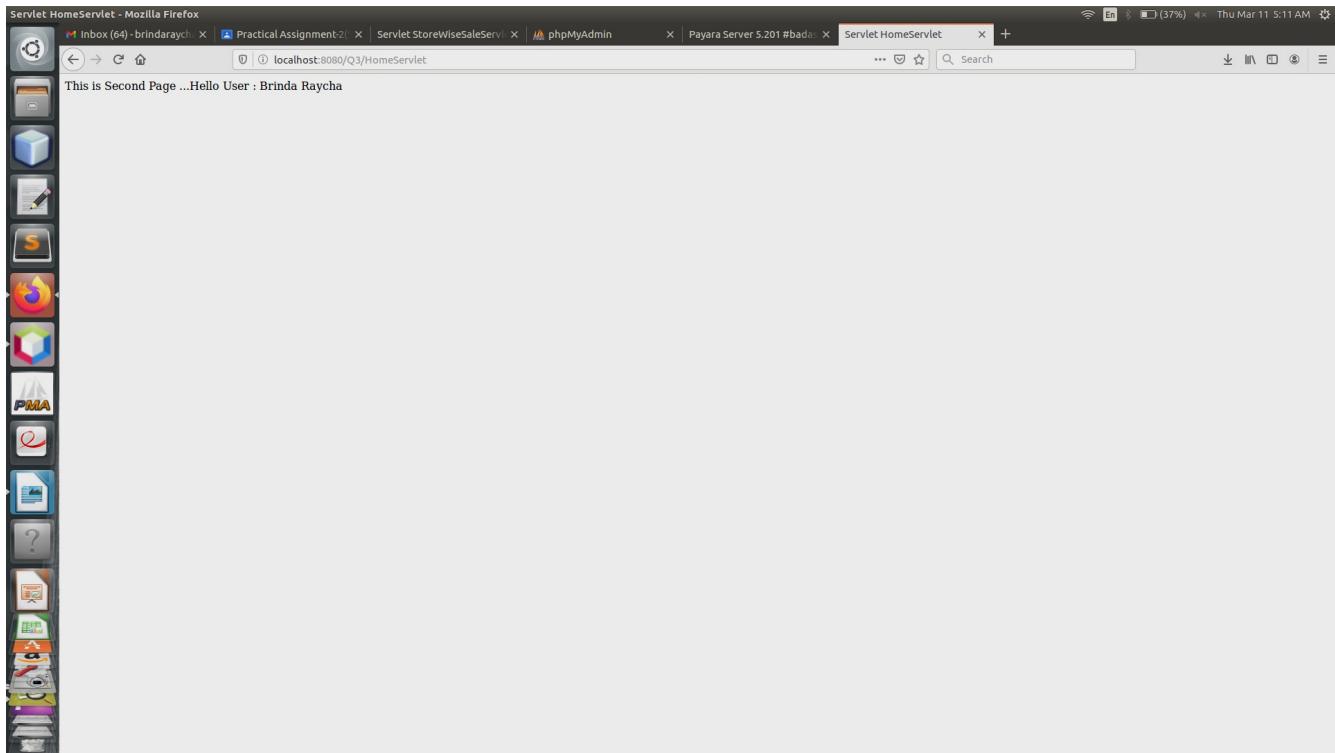
Output window content:

```
Payara Server x | Q2 (run) x
Incrementally redeploying Q2
run-deploy:
Browsing: http://localhost:8080/Q2
run-display-browser:
run:
BUILD SUCCESSFUL (total time: 0 seconds)
```

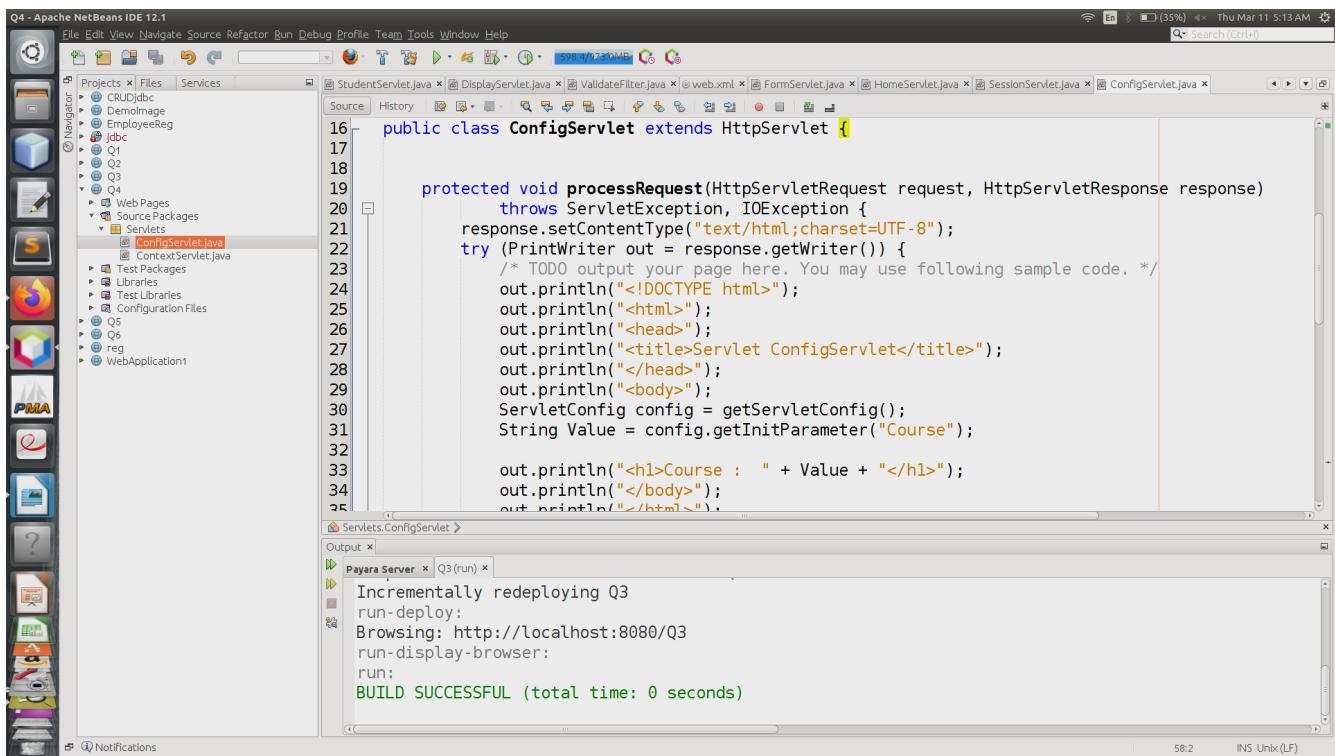
OUTPUT



Welcome : Brinda Raycha
[HomeServlet](#)



Q-4



ConfigServlet

```
package Servlets;

import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletConfig;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
```

```
* @author brinda
*/
public class ConfigServlet extends HttpServlet {

    protected void processRequest(HttpServletRequest request,
        HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out = response.getWriter()) {
            /* TODO output your page here. You may use following sample
            code. */
            out.println("<!DOCTYPE html>");
            out.println("<html>");
            out.println("<head>");
            out.println("<title>Servlet ConfigServlet</title>");
            out.println("</head>");
            out.println("<body>");
            ServletConfig config = getServletConfig();
            String Value = config.getInitParameter("Course");

            out.println("<h1>Course : " + Value + "</h1>");
            out.println("</body>");
            out.println("</html>");
        }
    }

    @Override
    protected void doGet(HttpServletRequest request, HttpServletResponse
        response)
        throws ServletException, IOException {
        processRequest(request, response);
    }
}
```

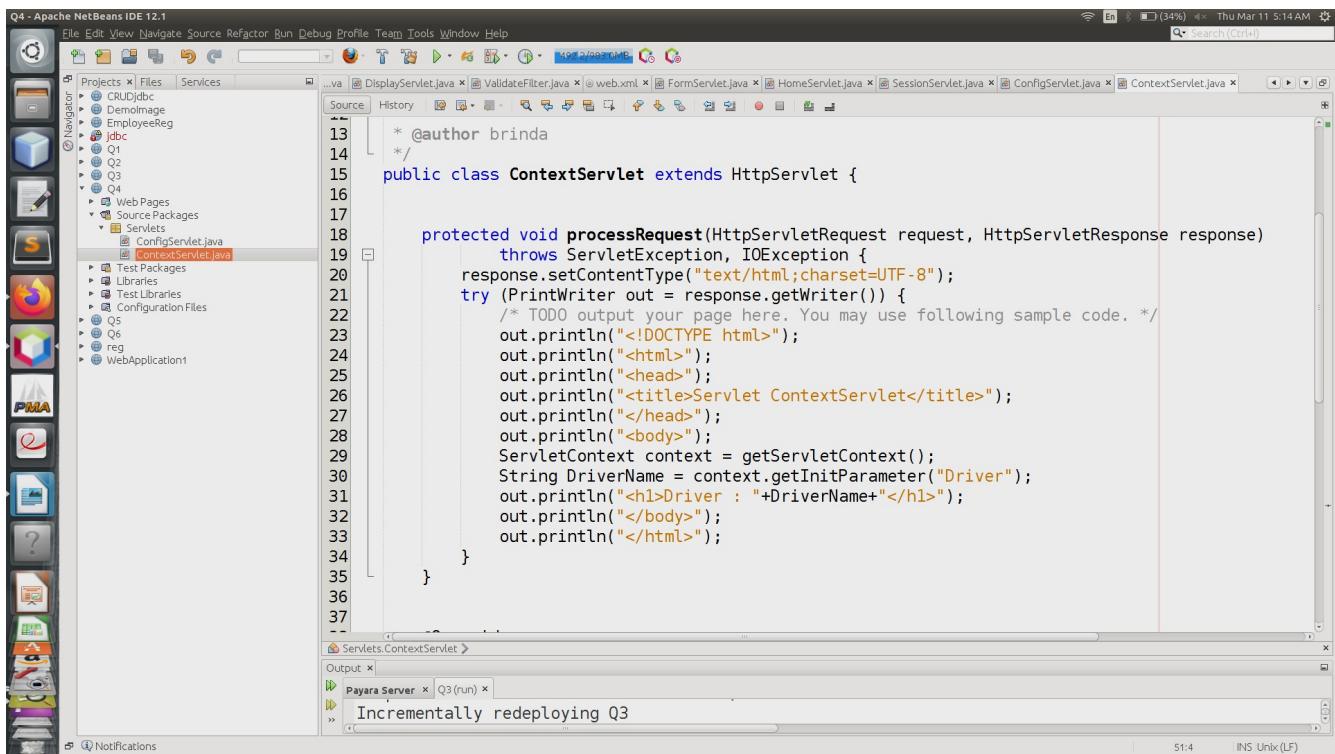
```

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
throws ServletException, IOException {
processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
}// </editor-fold>

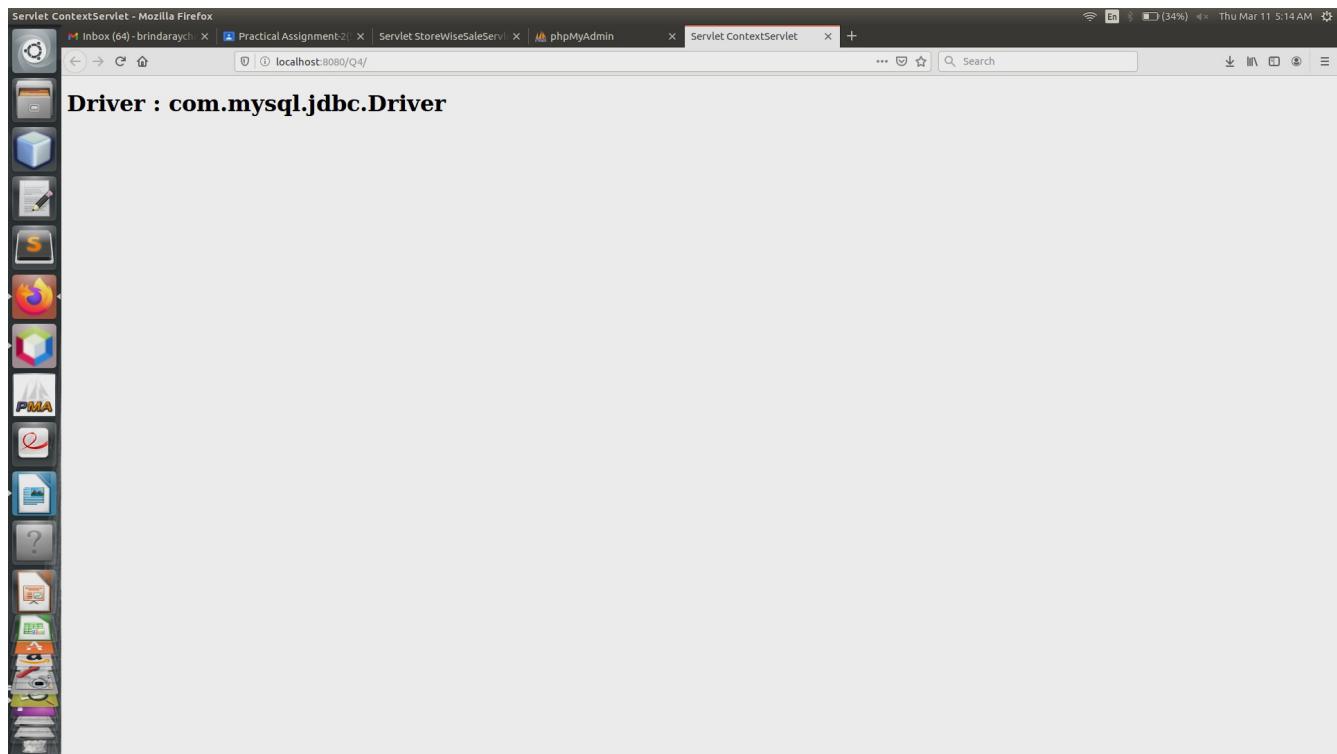
}

```

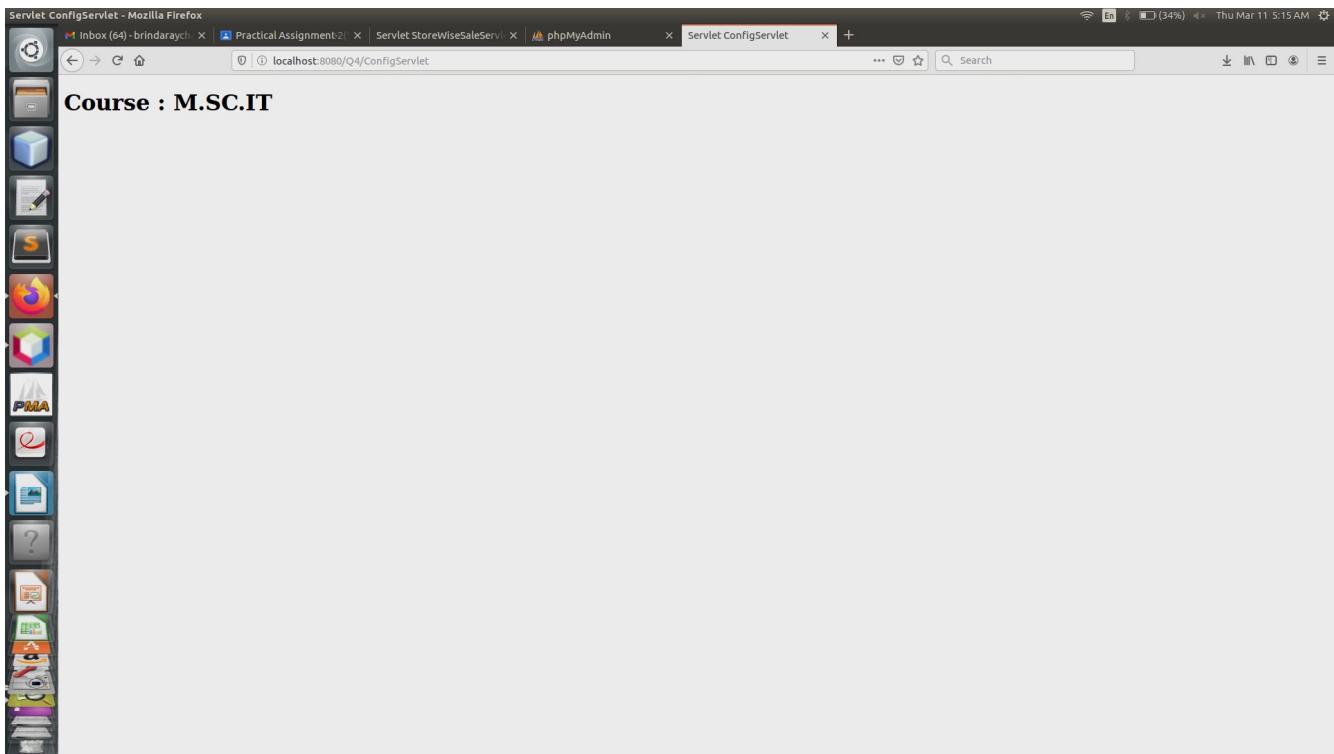


OUTPUT

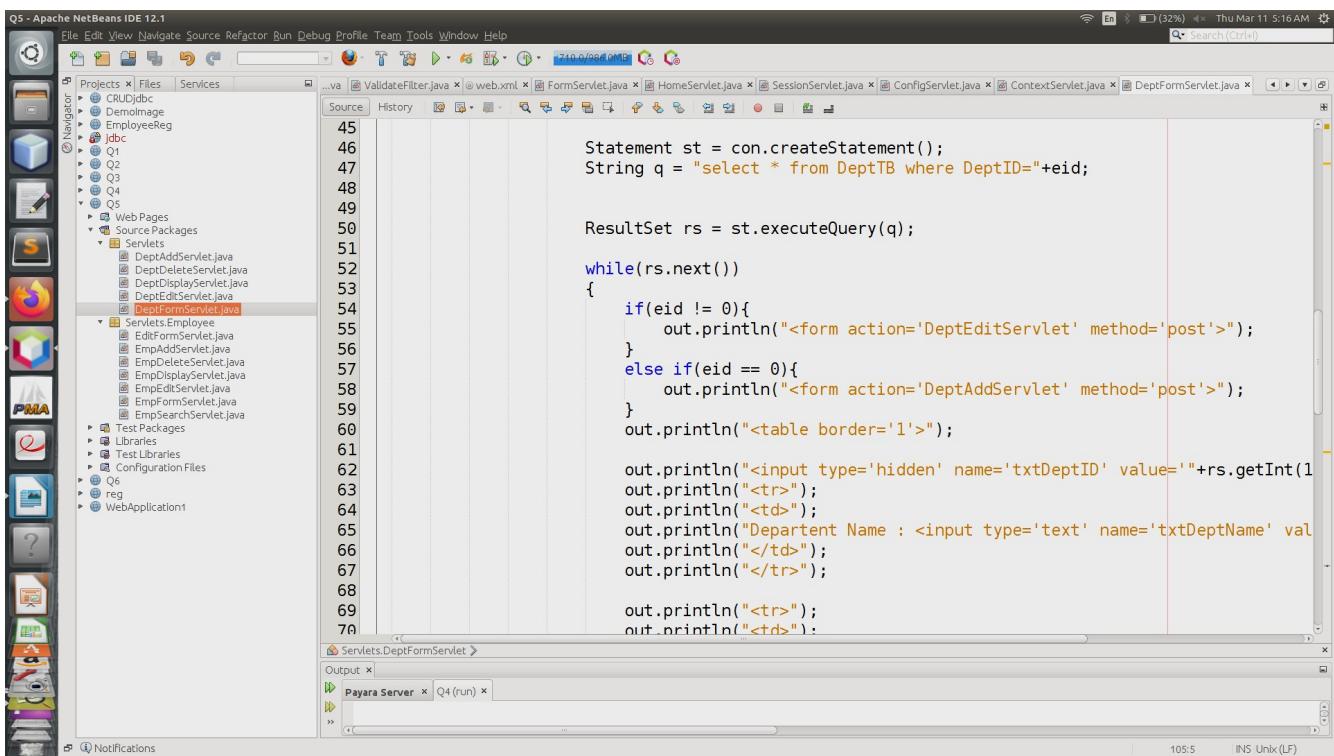
ContextServlet



ConfigServlet



Q-5



DeptFormServlet

```
package Servlets;

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.Statement;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author brinda
 */
public class DeptFormServlet extends HttpServlet {

    protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
        throws ServletException, IOException {
        response.setContentType("text/html;charset=UTF-8");
        try (PrintWriter out = response.getWriter()) {
            /* TODO output your page here. You may use following sample
code. */
            out.println("<!DOCTYPE html>");
            out.println("<html>");
            out.println("<head>");
```

```
out.println("<title>Servlet DeptFormServlet</title>");
out.println("</head>");
out.println("<body>");

try{
    int eid = Integer.parseInt(request.getParameter("eid"));
    Class.forName("com.mysql.jdbc.Driver");

    String url = "jdbc:mysql://localhost/Ass2";
    String user = "root";
    String password = "brinda";

    Connection con = DriverManager.getConnection(url, user,
password);

    Statement st = con.createStatement();
    String q = "select * from DeptTB where DeptID="+eid;

    ResultSet rs = st.executeQuery(q);

    while(rs.next())
    {
        if(eid != 0){
            out.println("<form action='DeptEditServlet'
method='post'>");
        }
        else if(eid == 0){
            out.println("<form action='DeptAddServlet'
method='post'>");
        }
        out.println("<table border='1'>");
```

```

        out.println("<input type='hidden' name='txtDeptID'
value='"+rs.getInt(1)+">");
        out.println("<tr>");
        out.println("<td>");
        out.println("Departent Name : <input type='text'
name='txtDeptName' value='"+rs.getString(2)+" >");
        out.println("</td>");
        out.println("</tr>");

        out.println("<tr>");
        out.println("<td>");
        out.println("<input type='submit' value='submit'>");
        out.println("</td>");

        out.println("</tr>");
        out.println("</table>");
        out.println("</form>");
    }

}catch(Exception ex)
{
    out.println("Error : " + ex.getMessage());
}
}

//out.println("<h1>Servlet DeptFormServlet at " +
request.getContextPath() + "</h1>");
    out.println("</body>");
    out.println("</html>");
}

}

```

@Override

```
protected void doGet(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
// </editor-fold>

}
```

DeptAddServlet

```
package Servlets;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
```

```
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author brinda
 */
public class DeptAddServlet extends HttpServlet {

    protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        /* TODO output your page here. You may use following sample
code. */
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet DeptAddServlet</title>");
        out.println("</head>");
        out.println("<body>");
        try{
            String DeptName = request.getParameter("txtDeptName");

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

            String url = "jdbc:mysql://localhost/Ass2";
            String user = "root";
            String password = "brinda";

            Connection con = DriverManager.getConnection(url, user,
password);

            String query = "insert into DeptTB (DeptName) values(?)";

```

```
PreparedStatement pt = con.prepareStatement(query);

pt.setString(1, DeptName);

int rows = pt.executeUpdate();
if(rows > 0)
{
    response.sendRedirect("DeptDisplayServlet");
    //out.println("inserted");
}

pt.close();
con.close();
}catch(Exception ex)
{
    System.out.println("Error : " + ex);
}
//out.println("<h1>Servlet DeptAddServlet at " +
request.getContextPath() + "</h1>");
out.println("</body>");
out.println("</html>");
}
}
```

```
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}
```

```
@Override
```

```
protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
}// </editor-fold>

}
```

DeptDeleteServlet

```
package Servlets;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.PreparedStatement;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author brinda
 */
public class DeptDeleteServlet extends HttpServlet {
```

```
protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
    throws ServletException, IOException {
response.setContentType("text/html;charset=UTF-8");
try (PrintWriter out = response.getWriter()) {
    /* TODO output your page here. You may use following sample
code. */
    out.println("<!DOCTYPE html>");
    out.println("<html>");
    out.println("<head>");
    out.println("<title>Servlet DeptDeleteServlet</title>");
    out.println("</head>");
    out.println("<body>");

    int id = Integer.parseInt(request.getParameter("id"));

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

        String url = "jdbc:mysql://localhost/Ass2";
        String user = "root";
        String password = "brinda";

        Connection con = DriverManager.getConnection(url, user,
password);

        String query = "delete from DeptTB where DeptID=?";

        PreparedStatement pt = con.prepareStatement(query);

        pt.setInt(1, id);

        int rows = pt.executeUpdate();
```

```
    if(rows > 0 )
    {
        response.sendRedirect("DeptDisplayServlet");
    }

    pt.close();
    con.close();

}catch(Exception ex)
{
    System.out.println("error : " + ex.getMessage());
}
out.println("</body>");
out.println("</html>");
}

}

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
```

```
public String getServletInfo() {  
    return "Short description";  
}// </editor-fold>  
  
}
```

DeptEditServlet

```
package Servlets;  
  
import java.io.IOException;  
import java.io.PrintWriter;  
import java.sql.Connection;  
import java.sql.DriverManager;  
import java.sql.PreparedStatement;  
import javax.servlet.ServletException;  
import javax.servlet.http.HttpServlet;  
import javax.servlet.http.HttpServletRequest;  
import javax.servlet.http.HttpServletResponse;  
  
/**  
 *  
 * @author brinda  
 */  
public class DeptEditServlet extends HttpServlet {  
  
    protected void processRequest(HttpServletRequest request,  
        HttpServletResponse response)  
        throws ServletException, IOException {  
        response.setContentType("text/html;charset=UTF-8");  
        try (PrintWriter out = response.getWriter()) {
```

```
/* TODO output your page here. You may use following sample
code. */
out.println("<!DOCTYPE html>");
out.println("<html>");
out.println("<head>");
out.println("<title>Servlet DeptEditServlet</title>");
out.println("</head>");
out.println("<body>");
try{
    String DeptName = request.getParameter("txtDeptName");
    int eid = Integer.parseInt(request.getParameter("txtDeptID"));

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

    String url = "jdbc:mysql://localhost/Ass2";
    String user = "root";
    String password = "brinda";

    Connection con = DriverManager.getConnection(url, user,
password);

    String query = "update DeptTB set DeptName=? where
DeptID="+eid;
    PreparedStatement pt = con.prepareStatement(query);

    pt.setString(1, DeptName);

    int rows = pt.executeUpdate();
    if(rows > 0)
    {
        response.sendRedirect("DeptDisplayServlet");
        //out.println("inserted");
    }
}
```

```
        pt.close();
        con.close();
    }catch(Exception ex)
    {
        out.println("Error : " + ex);
    }
    out.println("</body>");
    out.println("</html>");
}
}

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
}// </editor-fold>

}
```

DeptDisplayServlet

```
package Servlets;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author brinda
 */
public class DeptDisplayServlet extends HttpServlet {

    protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        /* TODO output your page here. You may use following sample
code. */
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet DeptDisplayServlet</title>");
```

```
out.println("</head>");  
out.println("<body>");  
out.println("<a href='DeptFormServlet'>");  
out.println("ADD RECORD..");  
out.println("</a>");  
out.println("<br>");  
out.println("<table border='3'>");  
  
out.println("<th>");  
out.println("DeptName");  
out.println("</th>");  
  
out.println("<th>");  
out.println("EDIT");  
out.println("</th>");  
out.println("<th>");  
out.println("DELETE");  
out.println("</th>");  
out.println("</tr>");  
  
try{  
    Class.forName("com.mysql.jdbc.Driver");  
  
    String url = "jdbc:mysql://localhost/Ass2";  
    String user = "root";  
    String password = "brinda";  
  
    Connection con = DriverManager.getConnection(url, user,  
password);  
  
    Statement st = con.createStatement();  
    String q = "select * from DeptTB";  
  
    ResultSet rs = st.executeQuery(q);
```

```
        while(rs.next())
    {
        out.println("<tr>");
        //out.println("<td>" + rs.getInt(1));
        out.println("<td>" + rs.getString(2));

        out.println("<td>");
        out.println("<a href='DeptFormServlet?eid=" + rs.getInt(1) + "'>");
        out.println("Edit");
        out.println("</a>");
        out.println("</td>");
        out.println("<td>");
        out.println("<a href='DeptDeleteServlet?id=" + rs.getInt(1) + "'>");
        out.println("Delete");
        out.println("</a>");
        out.println("</td>");
        out.println("</tr>");
    }

    st.close();
    con.close();

}catch(Exception ex)
{
    System.out.println("error : " + ex.getMessage());
}

        out.println("</table>");
        //out.println("<h1>Servlet DeptDisplayServlet at " +
request.getContextPath() + "</h1>");
        out.println("</body>");
        out.println("</html>");
}
```

```
}

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

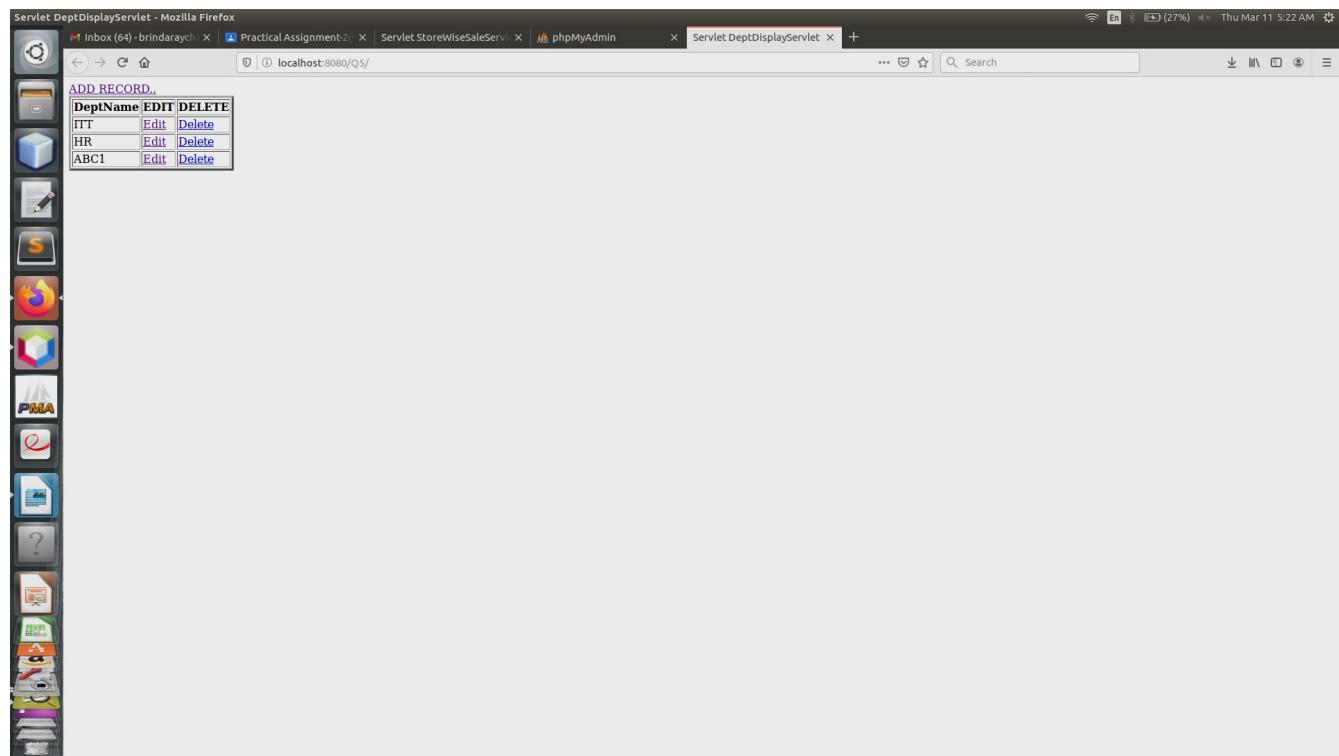
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
}// </editor-fold>

}
```

OUTPUT

DeptDisplayServlet

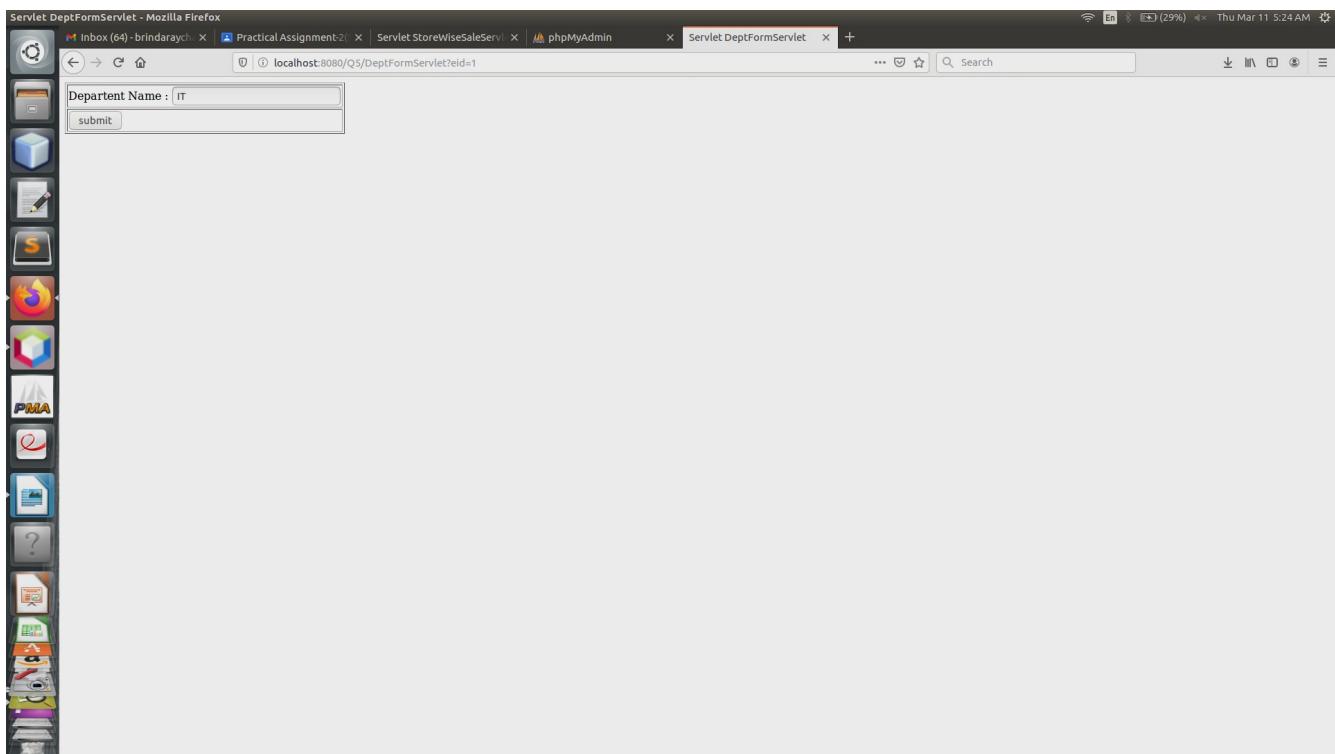


DeptEditServlet

Servlet DeptFormServlet - Mozilla Firefox

Inbox (64) - brindaraych | Practical Assignment-2 | Servlet StoreWiseSaleServ | phpMyAdmin | localhost:8080/Q5/DeptFormServlet?eid=1 | Search

Departent Name : IT
submit



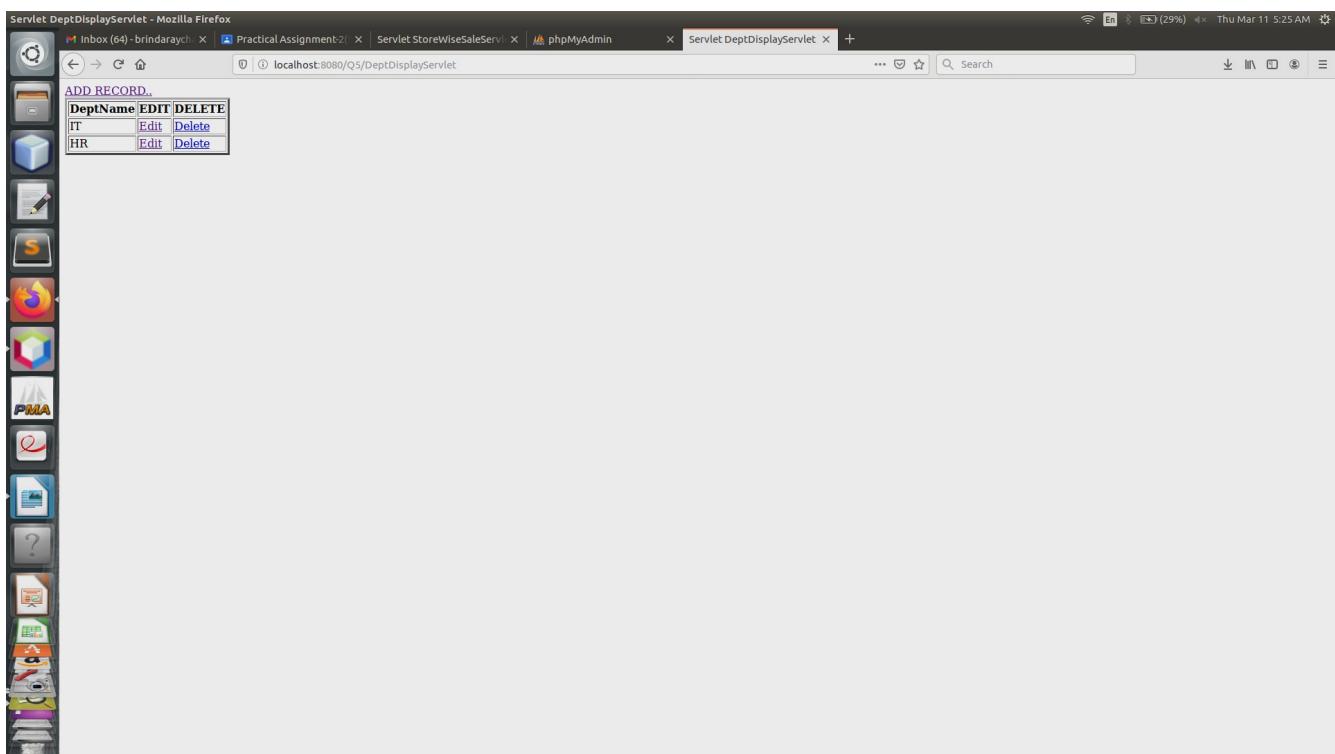
DeptDeleteServlet

Servlet DeptDisplayServlet - Mozilla Firefox

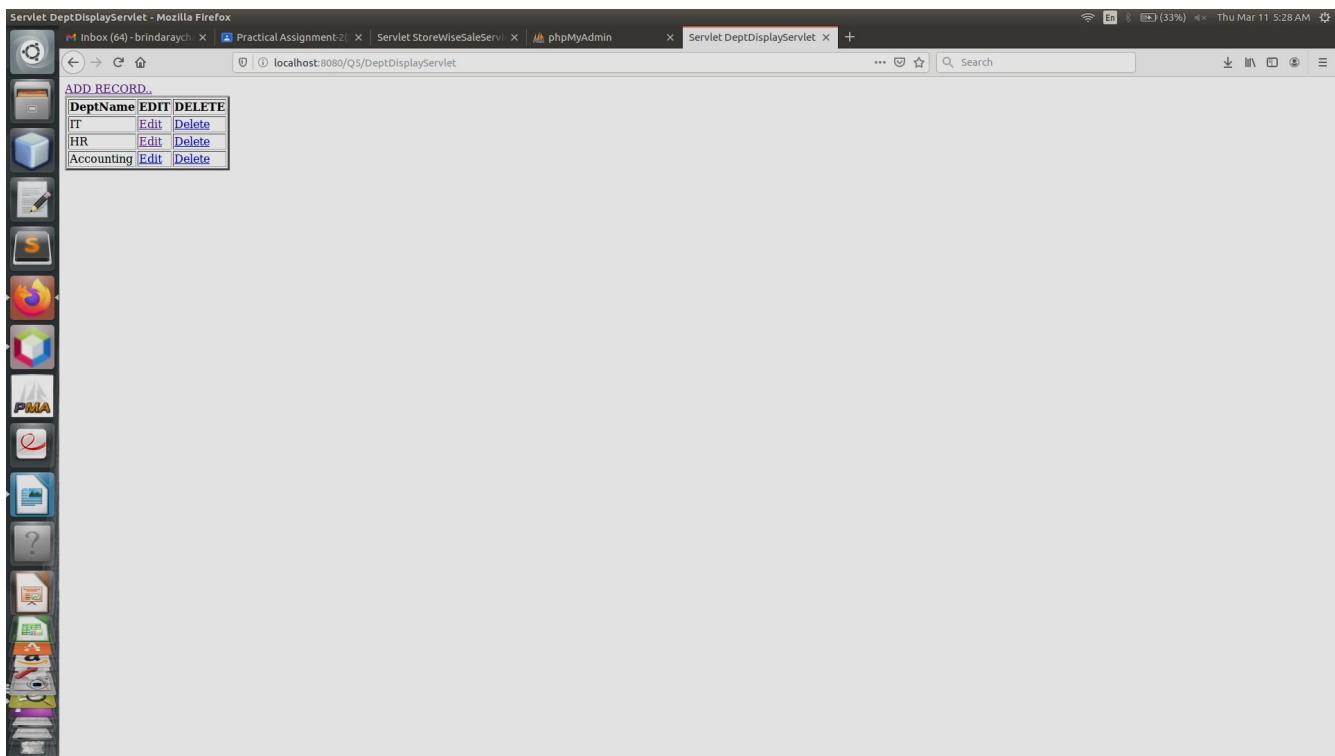
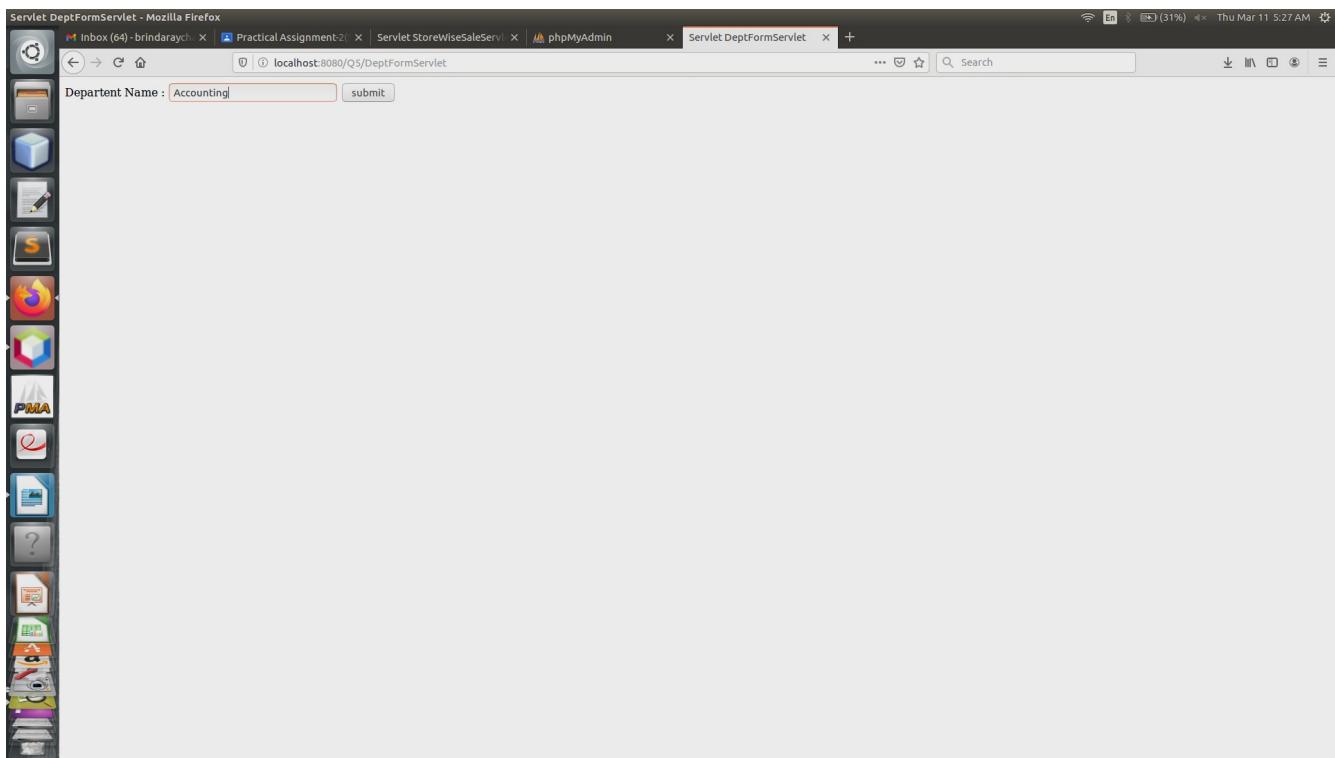
Inbox (64) - brindaraych | Practical Assignment-2 | Servlet StoreWiseSaleServ | phpMyAdmin | localhost:8080/Q5/DeptDisplayServlet | Search

ADD RECORD.

DeptName	EDIT	DELETE
IT	Edit	Delete
HR	Edit	Delete



DeptAddServlet



EmpFormServlet

```
package Servlets.Employee;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author brinda
 */
public class EmpFormServlet extends HttpServlet {

    protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        /* TODO output your page here. You may use following sample
code. */
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet EmpFormServlet</title>");
```

```
out.println("</head>");  
out.println("<body>");  
  
try{  
    out.println("<form action='EmpAddServlet' method='post'>");  
    out.println("<table border='1'>");  
  
    out.println("<tr>");  
    out.println("<td>");  
    out.println("Employee Name : <input type='text'  
name='txtEmpName' >");  
    out.println("</td>");  
    out.println("</tr>");  
  
    out.println("<tr>");  
    out.println("<td>");  
    out.println("Employee Salary : <input type='text'  
name='txtEmpSalary' >");  
    out.println("</td>");  
    out.println("</tr>");  
  
    Class.forName("com.mysql.jdbc.Driver");  
  
    String url = "jdbc:mysql://localhost/Ass2";  
    String user = "root";  
    String password = "brinda";  
  
    Connection con = DriverManager.getConnection(url, user,  
password);  
  
    Statement st = con.createStatement();  
    String q = "select * from DeptTB";  
  
  
    ResultSet rs = st.executeQuery(q);
```

```
        out.println("<tr>");
        out.println("<td>");
        out.println("Department Name : <select name='txtDeptID' id='txtDeptID'>");
        out.println("<option value='0'>--Select Dept--</option>");
        while(rs.next())
        {
            out.println("<option value='"+rs.getInt("DeptID")+">" + rs.getString("DeptName") + "</option>");
        }
        out.println("</select>");
        out.println("</td>");
        out.println("</tr>");

        out.println("<tr>");
        out.println("<td>");
        out.println("<input type='submit' value='submit'>");
        out.println("</td>");

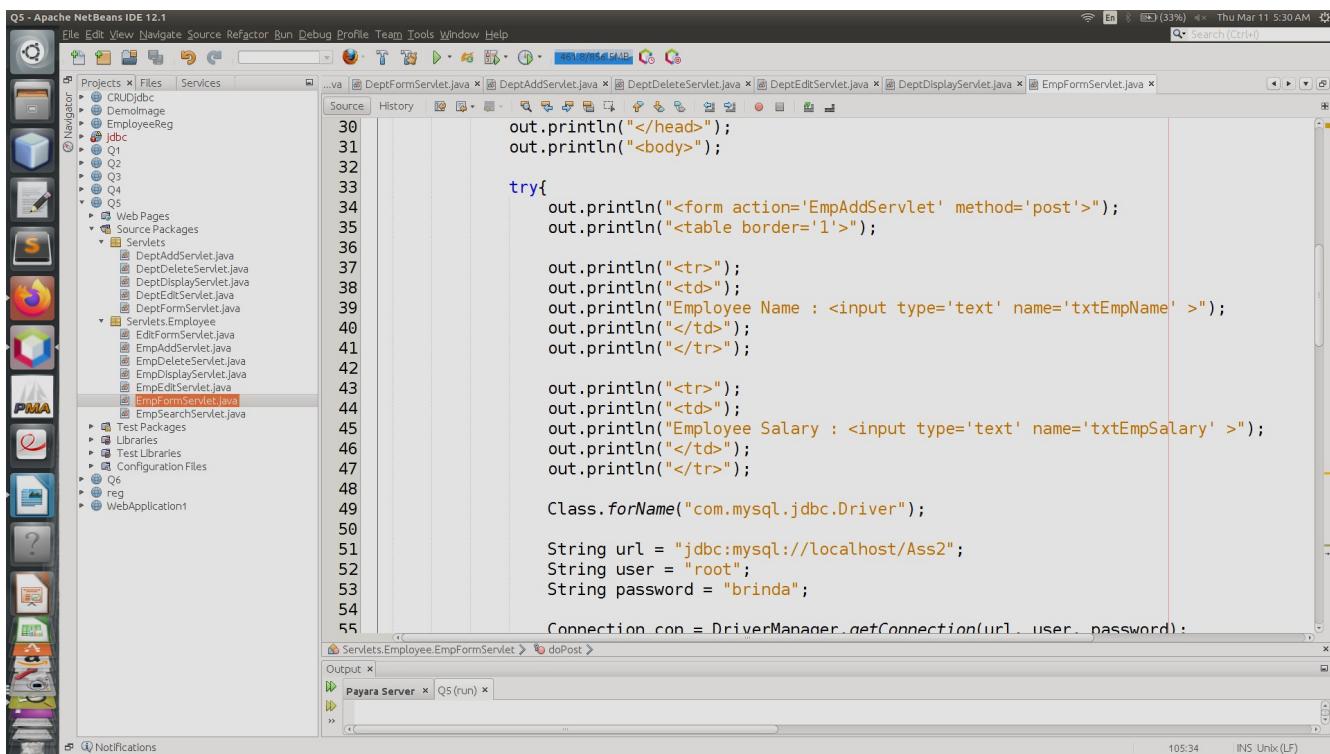
        out.println("</tr>");
        out.println("</table>");
        out.println("</form>");

    }catch(Exception ex){
        out.println("Error : " + ex.getMessage());
    }

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

}
```

```
@Override  
protected void doGet(HttpServletRequest request, HttpServletResponse  
response)  
    throws ServletException, IOException {  
    processRequest(request, response);  
}  
  
  
@Override  
protected void doPost(HttpServletRequest request, HttpServletResponse  
response)  
    throws ServletException, IOException {  
    processRequest(request, response);  
}  
  
  
@Override  
public String getServletInfo() {  
    return "Short description";  
    } // </editor-fold>  
}
```



EmpAddServlet

```
package Servlets.Employee;  
  
import java.io.IOException;  
import java.io.PrintWriter;  
import java.sql.Connection;  
import java.sql.DriverManager;  
import java.sql.PreparedStatement;  
import javax.servlet.ServletException;  
import javax.servlet.http.HttpServlet;  
import javax.servlet.http.HttpServletRequest;  
import javax.servlet.http.HttpServletResponse;  
  
/**  
 *  
 * @author brinda  
 */
```

```
public class EmpAddServlet extends HttpServlet {  
  
    protected void processRequest(HttpServletRequest request,  
HttpServletResponse response)  
        throws ServletException, IOException {  
    response.setContentType("text/html;charset=UTF-8");  
    try (PrintWriter out = response.getWriter()) {  
        /* TODO output your page here. You may use following sample  
code. */  
        out.println("<!DOCTYPE html>");  
        out.println("<html>");  
        out.println("<head>");  
        out.println("<title>Servlet EmpAddServlet</title>");  
        out.println("</head>");  
        out.println("<body>");  
        try{  
            String EmpName = request.getParameter("txtEmpName");  
            String EmpSalary = request.getParameter("txtEmpSalary");  
            int DeptID = Integer.parseInt(request.getParameter("txtDeptID"));  
  
            Class.forName("com.mysql.jdbc.Driver");  
  
            String url = "jdbc:mysql://localhost/Ass2";  
            String user = "root";  
            String password = "brinda";  
  
            Connection con = DriverManager.getConnection(url, user,  
password);  
  
            String query = "insert into EmpTB  
(EmpName,EmpSalary,DeptID) values(?, ?, ?)";  
            PreparedStatement pt = con.prepareStatement(query);  
  
            pt.setString(1, EmpName);
```

```
        pt.setString(2, EmpSalary);
        pt.setInt(3, DeptID);

        int rows = pt.executeUpdate();
        if(rows > 0)
        {
            response.sendRedirect("EmpDisplayServlet");
            //out.println("inserted");
        }

        pt.close();
        con.close();
    }catch(Exception ex)
    {
        System.out.println("Error : " + ex);
    }
    out.println("</body>");
    out.println("</html>");
}
}

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}
```

```
    }

    @Override
    public String getServletInfo() {
        return "Short description";
    } // </editor-fold>

}
```

EmpEditServlet

```
package Servlets.Employee;
```

```
import java.io.IOException;
import java.io.PrintWriter;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
```

```
/*
 *
 * @author brinda
 */
public class EmpEditServlet extends HttpServlet {
```

```
    protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
```

```
/* TODO output your page here. You may use following sample
code. */
    out.println("<!DOCTYPE html>");
    out.println("<html>");
    out.println("<head>");
    out.println("<title>Servlet EmpEditServlet</title>");
    out.println("</head>");
    out.println("<body>");
    out.println("<h1>Servlet EmpEditServlet at " +
request.getContextPath() + "</h1>");
    out.println("</body>");
    out.println("</html>");
}
}
```

```
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
```

```
    throws ServletException, IOException {
    processRequest(request, response);
}
```

```
@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
```

```
    throws ServletException, IOException {
    processRequest(request, response);
}
```

```
@Override
public String getServletInfo() {
    return "Short description";
```

```
}// </editor-fold>  
}
```

EmpDeleteServlet

```
package Servlets.Employee;  
  
import java.io.IOException;  
import java.io.PrintWriter;  
import java.sql.Connection;  
import java.sql.DriverManager;  
import java.sql.PreparedStatement;  
import javax.servlet.ServletException;  
import javax.servlet.http.HttpServlet;  
import javax.servlet.http.HttpServletRequest;  
import javax.servlet.http.HttpServletResponse;  
  
/**  
 *  
 * @author brinda  
 */  
public class EmpDeleteServlet extends HttpServlet {  
  
    protected void processRequest(HttpServletRequest request,  
        HttpServletResponse response)  
        throws ServletException, IOException {  
        response.setContentType("text/html;charset=UTF-8");  
        try (PrintWriter out = response.getWriter()) {  
            /* TODO output your page here. You may use following sample  
             code. */  
            out.println("<!DOCTYPE html>");
```

```
out.println("<html>");
out.println("<head>");
out.println("<title>Servlet EmpDeleteServlet</title>");
out.println("</head>");
out.println("<body>");
int id = Integer.parseInt(request.getParameter("id"));

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

    String url = "jdbc:mysql://localhost/Ass2";
    String user = "root";
    String password = "brinda";

    Connection con = DriverManager.getConnection(url, user,
password);

    String query = "delete from EmpTB where EmpID=?";

    PreparedStatement pt = con.prepareStatement(query);

    pt.setInt(1, id);

    int rows = pt.executeUpdate();
    if(rows > 0 )
    {
        response.sendRedirect("EmpDisplayServlet");
    }

    pt.close();
    con.close();

}catch(Exception ex)
{
```

```
        System.out.println("error : " + ex.getMessage());
    }
    out.println("</body>");
    out.println("</html>");
}
}

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
}// </editor-fold>

}
```

EmpDisplayServlet

```
package Servlets.Employee;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author brinda
 */
public class EmpDisplayServlet extends HttpServlet {

    protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        /* TODO output your page here. You may use following sample
code. */
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet EmpDisplayServlet</title>");
        out.println("</head>");
        out.println("<body>");
```

```
out.println("<a href='EmpFormServlet'>");  
out.println("ADD RECORD..");  
out.println("</a>");  
out.println("<br>");  
out.println("<br>");  
out.println("<a href='EmpSearchServlet'>"+ "Search" +"</a>");  
  
out.println("<table border='3'>");  
  
out.println("<tr>");  
  
out.println("<th>");  
out.println("EmpName");  
out.println("</th>");  
  
out.println("<th>");  
out.println("EmpSalary");  
out.println("</th>");  
  
out.println("<th>");  
out.println("Department");  
out.println("</th>");  
  
out.println("<th>");  
out.println("EDIT");  
out.println("</th>");  
out.println("<th>");  
out.println("DELETE");  
out.println("</th>");  
out.println("</tr>");  
  
try{
```

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

String url = "jdbc:mysql://localhost/Ass2";
String user = "root";
String password = "brinda";

Connection con = DriverManager.getConnection(url, user,
password);

Statement st = con.createStatement();
String q = "select * from EmpTB inner join DeptTB on
EmpTB.DeptID = DeptTB.DeptID";

ResultSet rs = st.executeQuery(q);

while(rs.next())
{
    out.println("<tr>");

    out.println("<td>" + rs.getString(2)+"</td>");
    out.println("<td>" + rs.getString(3)+"</td>");
    out.println("<td>" + rs.getString("DeptName")+"</td>");

    out.println("<td>");
    out.println("<a href='EditFormServlet?eid="+rs.getInt("EmpID")
+"'>");
    out.println("Edit");
    out.println("</a>");
    out.println("</td>");
    out.println("<td>");
    out.println("<a href='EmpDeleteServlet?id="+rs.getInt(1)+"'>");
    out.println("Delete");
    out.println("</a>");
    out.println("</td>");
```

```
        out.println("</tr>");
    }

    st.close();
    con.close();

}catch(Exception ex)
{
    System.out.println("error : " + ex.getMessage());
}

out.println("</table>");
out.println("</body>");
out.println("</html>");
}

}

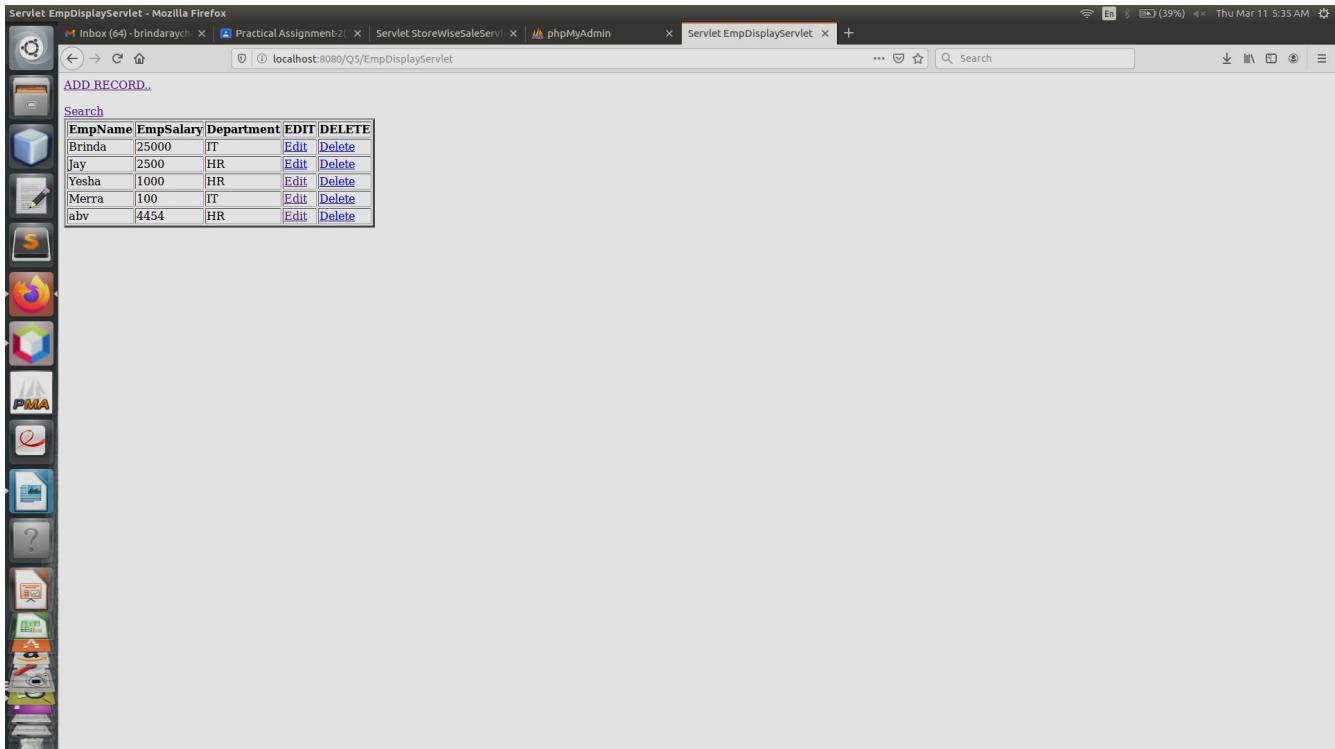
@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}
```

```
@Override  
public String getServletInfo() {  
    return "Short description";  
}// </editor-fold>  
  
}
```

OUTPUT

EmpDisplayServlet



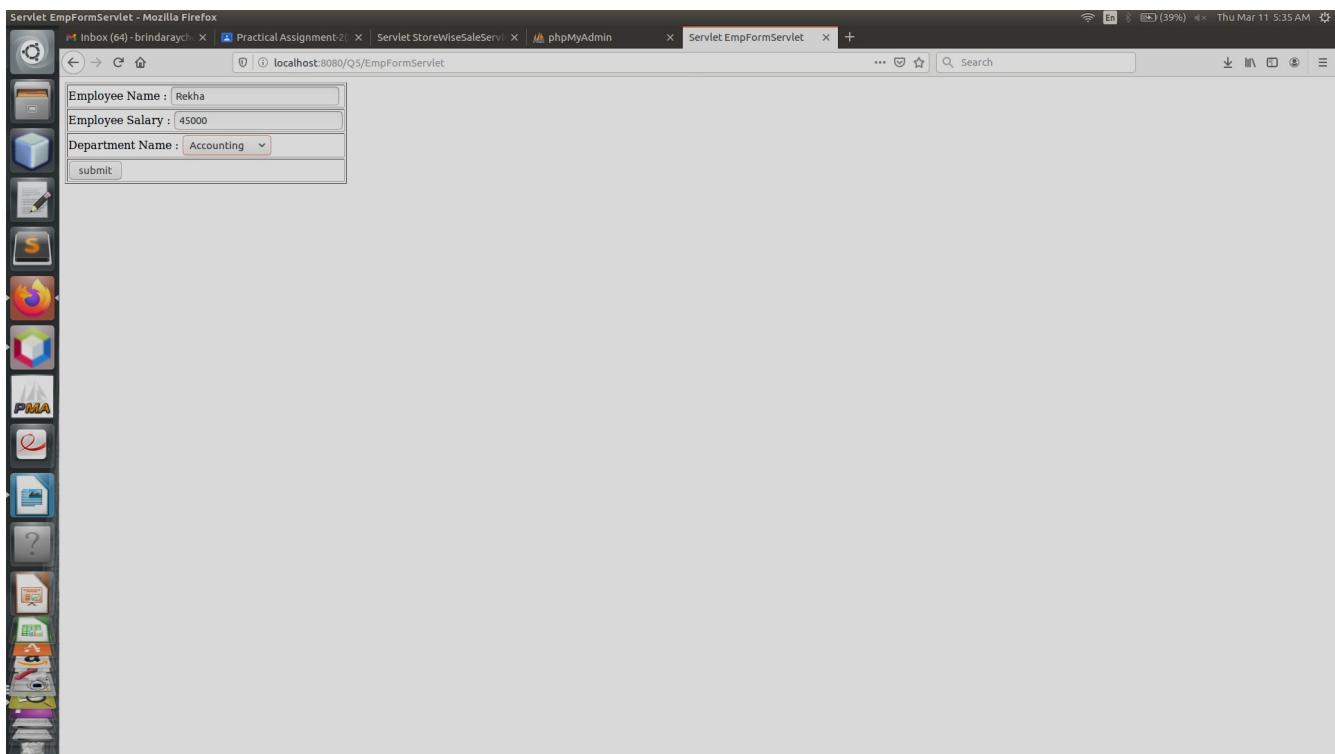
The screenshot shows a Mozilla Firefox browser window with multiple tabs open. The active tab is titled "Servlet EmpDisplayServlet". The URL in the address bar is "localhost:8080/QS/EmpDisplayServlet". The page content displays a table of employee data:

EmpName	EmpSalary	Department	EDIT	DELETE
Brinda	25000	IT	Edit	Delete
Jay	2500	HR	Edit	Delete
Yesha	1000	HR	Edit	Delete
Merra	100	IT	Edit	Delete
abv	4454	HR	Edit	Delete

EmpAddServlet

Servlet EmpFormServlet - Mozilla Firefox

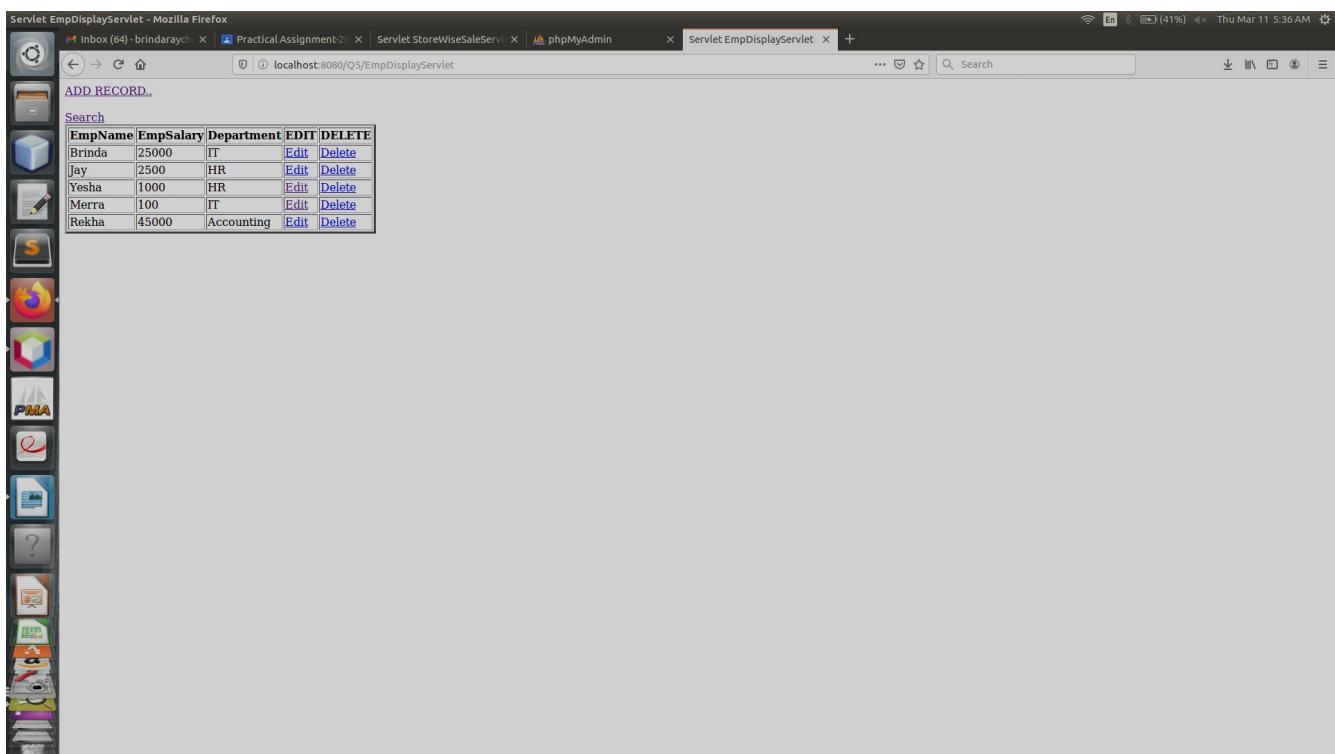
Employee Name : Rekha
Employee Salary : 45000
Department Name : Accounting
submit



Servlet EmpDisplayServlet - Mozilla Firefox

ADD RECORD.

EmpName	EmpSalary	Department	EDIT	DELETE
Brinda	25000	IT	Edit	Delete
Jay	2500	HR	Edit	Delete
Yesha	1000	HR	Edit	Delete
Merra	100	IT	Edit	Delete
Rekha	45000	Accounting	Edit	Delete



EmpEditServlet

Employee Name :	<input type="text" value="Rekha"/>
Employee Salary :	<input type="text" value="45000"/>
Department Name :	<input type="text" value="Accounting"/>
<input type="button" value="submit"/>	

EmpSearchServlet

```
package Servlets.Employee;

import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author brinda
 */
public class EmpSearchServlet extends HttpServlet {
```

```
protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
    throws ServletException, IOException {
response.setContentType("text/html;charset=UTF-8");
try (PrintWriter out = response.getWriter()) {
    /* TODO output your page here. You may use following sample
code. */
    out.println("<!DOCTYPE html>");
    out.println("<html>");
    out.println("<head>");
    out.println("<title>Servlet EmpSearchServlet</title>");
    out.println("</head>");
    out.println("<body>");

    try{
        out.println("<form action='EmpSearchServlet' method='post'>");
        out.println("<table border='1'>");

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

        String url = "jdbc:mysql://localhost/Ass2";
        String user = "root";
        String password = "brinda";

        Connection con = DriverManager.getConnection(url, user,
password);

        Statement st = con.createStatement();
        String q = "select * from DeptTB";

        ResultSet rs = st.executeQuery(q);

        out.println("<tr>");
```

```
        out.println("<td>");
        out.println("Department Name : <select name='txtDeptID' id='txtDeptID'>");
        out.println("<option value='0'>--Select Dept--</option>");
        while(rs.next())
        {
            out.println("<option value='"+rs.getInt("DeptID")
+">" +rs.getString("DeptName")+"</option>");
        }
        out.println("</select>");
        out.println("</td>");
        out.println("</tr>");

        out.println("<tr>");
        out.println("<td>");
        out.println("<input type='submit' value='submit'>");
        out.println("</td>");

        out.println("</tr>");
        out.println("</table>");
        out.println("</form>");

    }catch(Exception ex){
        out.println("Error : " + ex.getMessage());
    }

    out.println("<br>");
    out.println("<table border='3'>");

    out.println("<tr>");
```

```
out.println("<th>");
out.println("EmpName");
out.println("</th>");

out.println("<th>");
out.println("EmpSalary");
out.println("</th>");

out.println("<th>");
out.println("Department");
out.println("</th>");

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

try{

    int deptID = Integer.parseInt(request.getParameter("txtDeptID"));
    Class.forName("com.mysql.jdbc.Driver");

    String url = "jdbc:mysql://localhost/Ass2";
    String user = "root";
    String password = "brinda";

    Connection con = DriverManager.getConnection(url, user,
password);

    Statement st = con.createStatement();
    String q = "select * from EmpTB inner join DeptTB on
EmpTB.DeptID = DeptTB.DeptID"
        + " where EmpTB.DeptID =" +deptID;

    //String q = "select DeptID,sum(EmpSalary) from EmpTB group by
DeptID where DeptID=" +deptID;
```

```
ResultSet rs = st.executeQuery(q);

while(rs.next())
{
    out.println("<tr>");

    out.println("<td>" + rs.getString(2)+"</td>");
    out.println("<td>" + rs.getString(3)+"</td>");
    out.println("<td>" + rs.getString("DeptName")+"</td>");

    out.println("</tr>");
}

out.println("</table>");
out.println("<br>");
out.println("<br>");
out.println("<br>");

String q1 = "select DeptTB.DeptName,sum(EmpSalary) from
EmpTB inner join DeptTB on EmpTB.DeptID = DeptTB.DeptID group by
EmpTB.DeptID";
```

```
ResultSet rs1 = st.executeQuery(q1);
while(rs1.next())
{
    out.println("<lable> Department : " +
rs1.getString("DeptName")+"</lable>");
    out.println("====");
    out.println("<lable> Total : " + rs1.getString(2)+"</lable>");
    out.println("<br>");

}
```

```
st.close();
con.close();
```

```
        }catch(Exception ex)
        {
            System.out.println("error : " + ex.getMessage());
        }

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

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
}// </editor-fold>

}
```

DeptWiseSerach and total Salary DeptWise

The screenshot shows a Mozilla Firefox browser window with the title "Servlet EmpSearchServlet - Mozilla Firefox". The address bar displays "localhost:8080/Q5/EmpSearchServlet". The page content includes:

- A dropdown menu labeled "Department Name : -Select Dept-".
- A "submit" button.
- A table with columns "EmpName", "EmpSalary", and "Department". It contains two rows:

EmpName	EmpSalary	Department
Jay	2500	HR
Yesha	1000	HR
- Text output below the table:

Department : IT ===== Total : 25100
Department : HR ===== Total : 3500
Department : Accounting ===== Total : 45000

Q-6

Q6 - Apache NetBeans IDE 12.1

```

11  *
12  * @author brinda
13  */
14 public class CustFormServlet extends HttpServlet {
15
16
17     /*
18      * @author brinda
19      */
20
21     protected void processRequest(HttpServletRequest request, HttpServletResponse response)
22         throws ServletException, IOException {
23         response.setContentType("text/html;charset=UTF-8");
24         try (PrintWriter out = response.getWriter()) {
25             /* TODO output your page here. You may use following sample code. */
26             out.println("<!DOCTYPE html>");
27             out.println("<html>");
28             out.println("<head>");
29             out.println("<title>Servlet CustFormServlet</title>");
30             out.println("</head>");
31             out.println("<body>");
32             out.println("<form action='CustAddServlet' method='post'>");
33             out.println("Customer Name : <input type='text' name='txtCustName'><br><br>");
34             out.println("Customer Email : <input type='text' name='txtCustEmail'><br><br>");
35
36             out.println("<input type='submit' name='submit' value='submit'>");
37             out.println("</form>");
38             out.println("</body>");
39             out.println("</html>");
40
41         }
42     }
43
44
45 }

```

Customer.CustFormServlet >

Output

Payara Server x | Q5 (run) x

Q6 - Apache NetBeans IDE 12.1

```

13  /*
14   * @author brinda
15   */
16 @WebServlet(name = "EmpFormServlet", urlPatterns = {"/EmpFormServlet"})
17 public class EmpFormServlet extends HttpServlet {
18
19     /*
20      * @author brinda
21      */
22
23     protected void processRequest(HttpServletRequest request, HttpServletResponse response)
24         throws ServletException, IOException {
25         response.setContentType("text/html;charset=UTF-8");
26         try (PrintWriter out = response.getWriter()) {
27             /* TODO output your page here. You may use following sample code. */
28             out.println("<!DOCTYPE html>");
29             out.println("<html>");
30             out.println("<head>");
31             out.println("<title>Servlet EmpFormServlet</title>");
32             out.println("</head>");
33             out.println("<body>");
34             out.println("<form action='EmpAddServlet' method='post' enctype='multipart/form-data'");
35             out.println("Employee Name : <input type='text' name='txtEmpName'><br><br>");
36             out.println("Employee Image : <input type='file' name='file'> <br><br>");
37             out.println("<input type='submit' name='submit' value='submit'>");
38             out.println("</form>");
39             out.println("</body>");
40             out.println("</html>");
41
42         }
43     }
44
45 }

```

Employee.EmpFormServlet > processRequest > try >

Output

Payara Server x | Q5 (run) x

The screenshot shows the Apache NetBeans IDE 12.1 interface with the following details:

- Title Bar:** Shows "Q6 - Apache NetBeans IDE 12.1" and the system tray with battery level (49%), date ("Thu Mar 11 5:44 AM"), and search bar.
- Toolbar:** Standard NetBeans toolbar with icons for file operations, navigation, and tools.
- Project Explorer (Left):** Shows a project structure with packages like "CRUDJdbc", "EmployeeImage", "EmployeeReg", "Q1" through "Q6", "Web Pages", "Source Packages", "Customer", "Employee", "Purchase", and "Test Packages". Under "Purchase", there are files: "PurchaseFormServlet.java", "Sales", "Search", "Store", "Supplier", and "Item".
- Code Editor (Center):** The main editor window displays the Java code for "PurchaseFormServlet.java". The code includes imports for `HttpServlet`, `HttpServletRequest`, `HttpServletResponse`, `PrintWriter`, `SQLException`, and `IOException`. It defines a class `PurchaseFormServlet` that extends `HttpServlet` and overrides the `processRequest` method to handle form submissions and print an HTML response.
- Output Window (Bottom):** Shows the output of the run configuration, indicating "Payara Server" and "Q5 (run)".

The screenshot shows the Apache NetBeans IDE interface with the following details:

- Title Bar:** N6 - Apache NetBeans IDE 12.1
- Menu Bar:** File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help
- Toolbar:** Includes icons for Open, Save, Cut, Copy, Paste, Find, Select All, Undo, Redo, and others.
- Project Navigator:** Shows the current project structure with files like EmpDeleteServlet.java, EmpDisplayServlet.java, EditFormServlet.java, EmpSearchServlet.java, CustFormServlet.java, PurchaseFormServlet.java, and SaleFormServlet.java.
- Code Editor:** The main window displays the Java code for SaleFormServlet. The code includes imports for java.io, javax.servlet, javax.servlet.http, and javax.servlet.annotation. It defines a class SaleFormServlet that extends HttpServlet. The processRequest method sets the response content type to text/html; charset=UTF-8 and prints an HTML form to the output stream. The form has an action of 'SaleAddServlet' and a border of 1. It also attempts to load the MySQL JDBC driver and connect to a database at localhost with user 'root' and password 'brinda'.
- Output Panel:** Shows the Payara Server and Q5(run) tabs.
- Status Bar:** Displays the date and time (Thu Mar 11 5:46 AM), battery level (51%), and file number (140:4).

Q6 - Apache NetBeans IDE 12.1

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Source History Projects Files Services Navigator Output Notifications

```
10  /*
11  *
12  * @author brinda
13  */
14  public class StoreFormServlet extends HttpServlet {
15
16
17      protected void processRequest(HttpServletRequest request, HttpServletResponse response)
18          throws ServletException, IOException {
19          response.setContentType("text/html;charset=UTF-8");
20          try (PrintWriter out = response.getWriter()) {
21              /* TODO output your page here. You may use following sample code. */
22              out.println("<!DOCTYPE html>");
23              out.println("<html>");
24              out.println("<head>");
25              out.println("<title>Servlet StoreFormServlet</title>");
26              out.println("</head>");
27              out.println("<body>");
28              out.println("<form action='StoreAddServlet' method='post'");
29              out.println("Store Name : <input type='text' name='txtStoreName'><br><br>");
30              out.println("Store Address : <input type='text' name='txtAddress'><br><br>");
31
32              out.println("<input type='submit' name='submit' value='submit'>");
33              out.println("</form>");
34              out.println("</body>");
35              out.println("</html>");
```

Payara Server x QS (run) x

Notifications Q6 deployed.

Q6 - Apache NetBeans IDE 12.1

File Edit View Navigate Source Refactor Run Debug Profile Team Tools Window Help

Source History Projects Files Services Navigator Output Notifications

```
13  /*
14  * @author brinda
15  */
16  public class SupFormServlet extends HttpServlet {
17
18      protected void processRequest(HttpServletRequest request, HttpServletResponse response)
19          throws ServletException, IOException {
20          response.setContentType("text/html;charset=UTF-8");
21          try (PrintWriter out = response.getWriter()) {
22              /* TODO output your page here. You may use following sample code. */
23              out.println("<!DOCTYPE html>");
24              out.println("<html>");
25              out.println("<head>");
26              out.println("<title>Servlet SupFormServlet</title>");
27              out.println("</head>");
28              out.println("<body>");
29              out.println("<form action='SupAddServlet' method='post'");
30              out.println("Supplier Name : <input type='text' name='txtSupName'><br><br>");
31              out.println("Supplier Email : <input type='text' name='txtSupEmail'><br><br>");
32              out.println("<input type='submit' name='submit' value='submit'>");
33              out.println("</body>");
34              out.println("</html>");
```

Supplier:SupFormServlet x QS (run) x

Notifications

The screenshot shows the Apache NetBeans IDE 12.1 interface. The main window displays the Java code for `ItemFormServlet`. The code defines a servlet that processes requests and prints an HTML form to the response. The IDE's toolbar, menu bar, and various tool windows like Output and Notifications are visible.

```
16 * @author brinda
17
18 public class ItemFormServlet extends HttpServlet {
19
20     protected void processRequest(HttpServletRequest request, HttpServletResponse response)
21         throws ServletException, IOException {
22         response.setContentType("text/html;charset=UTF-8");
23         try (PrintWriter out = response.getWriter()) {
24             /* TODO output your page here. You may use following sample code. */
25             out.println("<!DOCTYPE html>");
26             out.println("<html>");
27             out.println("<head>");
28             out.println("<title>Servlet ItemFormServlet</title>");
29             out.println("</head>");
30             out.println("<body>");
31             out.println("<form action='ItemAddServlet' method='post' enctype='multipart/form-data'>");
32             out.println("Item Name : <input type='text' name='txtItemName'><br><br>");
33             out.println("Item Cost : <input type='text' name='txtCost'><br><br>");
34             out.println("Item Stock : <input type='text' name='txtStock'><br><br>");
35             out.println("Item Image : <input type='file' name='file'><br><br>");
36             out.println("<input type='submit' name='submit' value='submit'>");
37             out.println("</form>");
38             out.println("</body>");
39             out.println("</html>");
40         }
41     }
```

SEARCH

package Search;

```
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
```

```
/**
 *
 * @author brinda
```

```
 */
public class EmpWiseSaleServlet extends HttpServlet {

    protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        /* TODO output your page here. You may use following sample
code. */
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet EmpWiseSaleServlet</title>");
        out.println("</head>");
        out.println("<body>");
        out.println("<h1>Employee Wise Sale</h1>");
        try{
            out.println("<form action='EmpWiseSaleServlet' method='post'>");
            out.println("<table border='1'>");
            Class.forName("com.mysql.jdbc.Driver");

            String url = "jdbc:mysql://localhost/Ass2";
            String user = "root";
            String password = "brinda";

            Connection con = DriverManager.getConnection(url, user,
password);

            Statement st = con.createStatement();
            String q = "select * from Employee";
        }
    }
}
```

```
ResultSet rs = st.executeQuery(q);

out.println("<tr>");
out.println("<td>");
out.println("Employee Name : <select name='txtEmpID' id='txtEmpID'>");
out.println("<option value='0'>--Select Employee--</option>");
while(rs.next())
{
    out.println("<option value='"+rs.getInt("EmpID")+">" + rs.getString("EmpName") + "</option>");
}
out.println("</select>");
out.println("</td>");
out.println("</tr>");

out.println("<tr>");
out.println("<td>");
out.println("<input type='submit' value='submit'>");
out.println("</td>");

out.println("</tr>");
out.println("</table>");
out.println("</form>");

}catch(Exception ex){
    out.println("Error : " + ex.getMessage());
}

out.println("<br>");
out.println("<table border='3'>");
```

```
out.println("<th>");
out.println("Name");
out.println("</th>");
out.println("<th>");
out.println("Image");
out.println("</th>");
out.println("<th>ItemName</th>");
out.println("<th>ItemCost</th>");
out.println("<th>CustomerName</th>");
out.println("<th>CustomerEmail</th>");

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

try{
    int EmpID = Integer.parseInt(request.getParameter("txtEmpID"));

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

    String url = "jdbc:mysql://localhost/Ass2";
    String user = "root";
    String password = "brinda";

    Connection con = DriverManager.getConnection(url, user,
password);

    Statement st = con.createStatement();

    String q = "select * from Employee e ,Customer c , Item i , Sale s
where e.EmpID=s.EmpID and s.ItemID=i.ItemID and
s.CustomerID=c.CustID where e.EmpID="+EmpID;
    ResultSet rs = st.executeQuery(q);

    while(rs.next())
    {
```

```
        out.println("<tr>");

        out.println("<td>" + rs.getString("EmpName"));
        out.println("<td><img src=\"" + rs.getString("EmpImage")
+ ">" + "</td>");
        out.println("<td>" + rs.getString("ItemName") + "</td>");
        out.println("<td>" + rs.getString("ItemCost") + "</td>");
        out.println("<td>" + rs.getString("CustName") + "</td>");
        out.println("<td>" + rs.getString("CustEmail") + "</td>");
        out.println("</tr>");
    }

    st.close();
    con.close();

} catch(Exception ex)
{
    System.out.println("error : " + ex.getMessage());
}

        out.println("</table>");
        out.println("</body>");
        out.println("</html>");
    }
}

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}
```

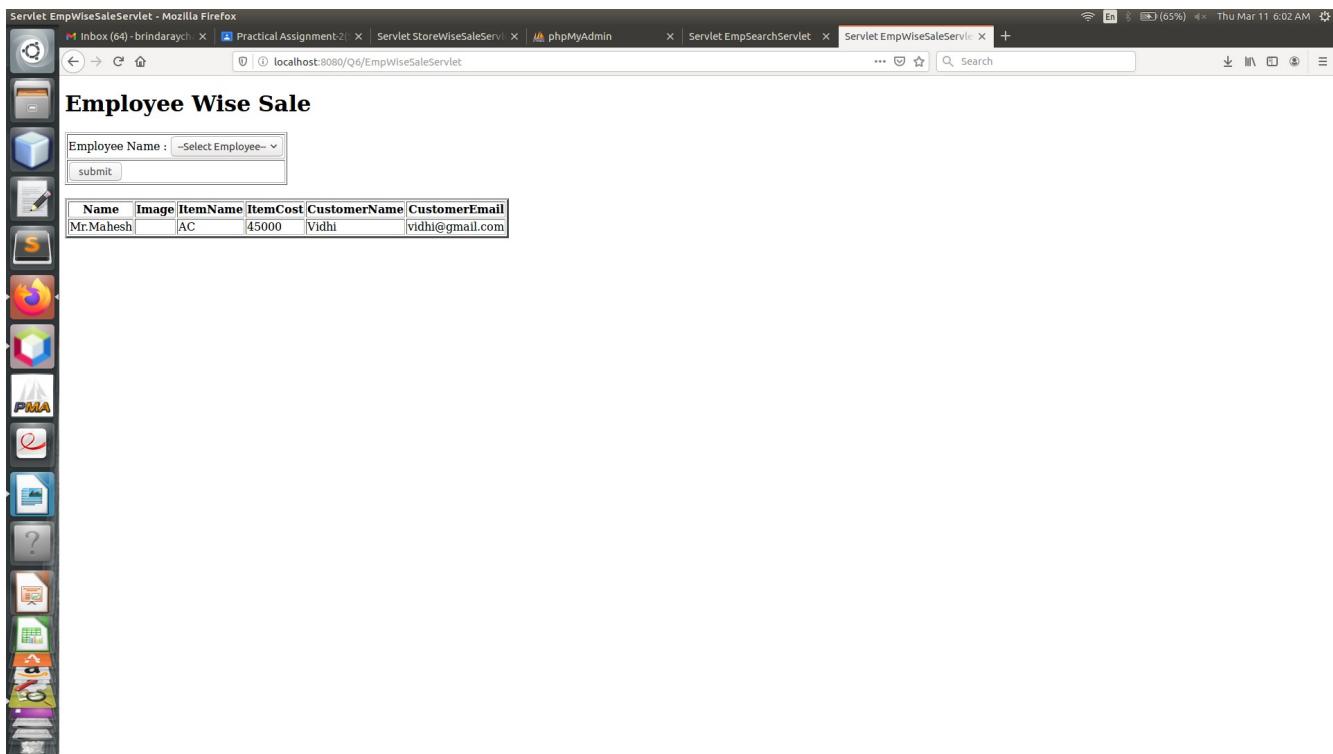
```

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
}// </editor-fold>

}

```



```
package Search;
```

```
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import javax.servlet.ServletException;
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
```

```
public class StoreWiseSaleServlet extends HttpServlet {
```

```
    protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        /* TODO output your page here. You may use following sample
code. */
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet StoreWiseSaleServlet</title>");
        out.println("</head>");
        out.println("<body>");
        out.println("<h1>Store Wise Sale</h1>");
        try{
            out.println("<form action='StoreWiseSaleServlet'>");
method='post'>");
```

```
out.println("<table border='1'>");

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

String url = "jdbc:mysql://localhost/Ass2";
String user = "root";
String password = "brinda";

Connection con = DriverManager.getConnection(url, user,
password);

Statement st = con.createStatement();
String q = "select * from Store";

ResultSet rs = st.executeQuery(q);

out.println("<tr>");
out.println("<td>");
out.println("Store Name : <select name='txtStoreID' id='txtStoreID'>");
out.println("<option value='0'>--Select Store--</option>");
while(rs.next())
{
    out.println("<option value='"+rs.getInt("StoreID") +"'>" +rs.getString("StoreName")+"</option>");
}
out.println("</select>");
out.println("</td>");
out.println("</tr>");

out.println("<tr>");
out.println("<td>");
out.println("<input type='submit' value='submit'>");
```

```
        out.println("</td>");

        out.println("</tr>");
        out.println("</table>");
        out.println("</form>");

    }catch(Exception ex){
        out.println("Error : " + ex.getMessage());
    }

    out.println("<br>");
    out.println("<table border='3'>");

    out.println("<th>Store Name</th>");
    out.println("<th>Store Address</th>");
    out.println("<th>Item Name</th>");
    out.println("<th>Item Cost</th>");
    out.println("<th>Item Stock</th>");

    out.println("<th>Customer Name</th>");
    out.println("<th>Customer Email</th>");

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

try{
    int StoreID = Integer.parseInt(request.getParameter("txtStoreID"));

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

    String url = "jdbc:mysql://localhost/Ass2";
    String user = "root";
    String password = "brinda";
```

```
Connection con = DriverManager.getConnection(url, user,
password);

Statement st = con.createStatement();

String q = "select * from Store s ,Customer c , Item i , Sale sl where
s.StoreID=sl.StoreID and sl.ItemID=i.ItemID and sl.CustomerID=c.CustID
and s.StoreID="+StoreID;

ResultSet rs = st.executeQuery(q);

while(rs.next())
{
    out.println("<tr>");

    out.println("<td>" + rs.getString("StoreName"));
    out.println("<td>" + rs.getString("StoreAdd") + "</td>");
    out.println("<td>" + rs.getString("ItemName") + "</td>");
    out.println("<td>" + rs.getString("ItemCost") + "</td>");
    out.println("<td>" + rs.getString("ItemStock") + "</td>");

    out.println("<td>" + rs.getString("CustName") + "</td>");
    out.println("<td>" + rs.getString("CustEmail") + "</td>");
    out.println("</tr>");

}

st.close();
con.close();

}catch(Exception ex)
{
    System.out.println("error : " + ex.getMessage());
}
```

```
        out.println("</table>");
        out.println("</body>");
        out.println("</html>");
    }
}

@Override
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
}// </editor-fold>

}
```

Store Wise Sale

Store Name :

Store Name	Store Address	Item Name	Item Cost	Item Stock	Customer Name	Customer Email
Meera Store	Udhna	Mobile	25000	50	Brinda	brinda@gmail.com

package Search;

```
import java.io.IOException;
import java.io.PrintWriter;
import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.ResultSet;
import java.sql.Statement;
import javax.servlet.ServletException;
```

```
import javax.servlet.http.HttpServlet;
import javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 *
 * @author brinda
 */
public class SupWisePurServlet extends HttpServlet {

    protected void processRequest(HttpServletRequest request,
HttpServletResponse response)
        throws ServletException, IOException {
    response.setContentType("text/html;charset=UTF-8");
    try (PrintWriter out = response.getWriter()) {
        /* TODO output your page here. You may use following sample
code. */
        out.println("<!DOCTYPE html>");
        out.println("<html>");
        out.println("<head>");
        out.println("<title>Servlet SupWisePurServlet</title>");
        out.println("</head>");
        out.println("<body>");
        out.println("<h1>Supplier Wise Purchase</h1>");
        try{
            out.println("<form action='SupWisePurServlet' method='post'>");
            out.println("<table border='1'>");
            Class.forName("com.mysql.jdbc.Driver");

            String url = "jdbc:mysql://localhost/Ass2";
            String user = "root";
            String password = "brinda";
        }
    }
}
```

```
Connection con = DriverManager.getConnection(url, user,
password);

Statement st = con.createStatement();
String q = "select * from Supplier";

ResultSet rs = st.executeQuery(q);

out.println("<tr>");
out.println("<td>");
out.println("Supplier Name : <select name='txtSupID' id='txtSupID'>");
out.println("<option value='0'>--Select Supplier--</option>");
while(rs.next())
{
    out.println("<option value='"+rs.getInt("SupplierID")+
    ">" +rs.getString("SupplierName")+"</option>");
}
out.println("</select>");
out.println("</td>");
out.println("</tr>");

out.println("<tr>");
out.println("<td>");
out.println("<input type='submit' value='submit'>");
out.println("</td>");

out.println("</tr>");
out.println("</table>");
out.println("</form>");

}catch(Exception ex){
```

```
        out.println("Error : " + ex.getMessage());
    }

    out.println("</br>");
    out.println("<table border='3'>");

    out.println("<th>");
    out.println("Name");
    out.println("</th>");
    out.println("<th>Email</th>");
    out.println("<th>ItemName</th>");
    out.println("<th>ItemCost</th>");
    out.println("<th>ItemStock</th>");
    out.println("<th>Purchase Date</th>");

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

try{
    int SupID = Integer.parseInt(request.getParameter("txtSupID"));

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

    String url = "jdbc:mysql://localhost/Ass2";
    String user = "root";
    String password = "brinda";

    Connection con = DriverManager.getConnection(url, user,
password);

    Statement st = con.createStatement();
```

```

String q = "select * from Supplier s ,Purchase p, Item i where
s.SupplierID=p.SupplierID and p.ItemID=i.ItemID and
s.SupplierID="+SupID;
ResultSet rs = st.executeQuery(q);

while(rs.next())
{
    out.println("<tr>");

    out.println("<td>" + rs.getString("SupplierName"));
    out.println("<td>" + rs.getString("SupplierEmail") + "</td>");
    out.println("<td>" + rs.getString("ItemName") + "</td>");
    out.println("<td>" + rs.getString("ItemCost") + "</td>");
    out.println("<td>" + rs.getString("ItemStock") + "</td>");
    out.println("<td>" + rs.getString("Date") + "</td>");
    out.println("</tr>");

}

st.close();
con.close();

}catch(Exception ex)
{
    System.out.println("error : " + ex.getMessage());
}

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

}
}

```

@Override

```
protected void doGet(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
    throws ServletException, IOException {
    processRequest(request, response);
}

@Override
public String getServletInfo() {
    return "Short description";
}// </editor-fold>

}
```

Servlet SupWisePurServlet - Mozilla Firefox

Inbox (64) - brindaraych | Practical Assignment2 | Servlet StoreWiseSaleServ | phpMyAdmin | Servlet EmpSearchServlet | Servlet SupWisePurServlet

localhost:8080/Q6/SupWisePurServlet

Supplier Wise Purchase

Supplier Name : Miss.Pankti

submit

Name	Email	ItemName	ItemCost	ItemStock	Purchase Date
Miss.Pankti	pankti@gmail.com	Mobile	25000	50	02/02/2020

DATABASE DESIGN

localhost / localhost / Ass2 | phpMyAdmin 4.5.4.1deb2ubuntu2.1 - Mozilla Firefox

Inbox (64) - brindaraych | Practical Assignment2 | Servlet StoreWiseSaleServ | localhost /localhost / Ass2 | Servlet EmpSearchServlet | Servlet EmpWiseSaleServ

localhost/phpmyadmin/db_structure.php?server=1&db=Ass2&token=51922d9cf4359f10ffcd3d0390e30e8

Server localhost > Database: Ass2

Structure SQL Search Query Export Import Operations Privileges Routines Events Triggers Designer

Table	Action	Rows	Type	Collation	Size	Overhead
Company	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16 Kib	
Customer	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16 Kib	
Demolimage	Browse Structure Search Insert Empty Drop	0	InnoDB	latin1_swedish_ci	16 Kib	
DeptTB	Browse Structure Search Insert Empty Drop	3	InnoDB	latin1_swedish_ci	16 Kib	
Employee	Browse Structure Search Insert Empty Drop	3	InnoDB	latin1_swedish_ci	16 Kib	
EmpTB	Browse Structure Search Insert Empty Drop	5	InnoDB	latin1_swedish_ci	16 Kib	
Item	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16 Kib	
Purchase	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16 Kib	
Sale	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16 Kib	
Store	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16 Kib	
Supplier	Browse Structure Search Insert Empty Drop	2	InnoDB	latin1_swedish_ci	16 Kib	
11 tables	Sum	25	InnoDB	latin1_swedish_ci	176 Kib	0 B

Check all With selected:

Print view Data dictionary

Create table

Name: Number of columns:

Go

Console

EmpTB

The screenshot shows the phpMyAdmin interface for the EmpTB table. The table structure is as follows:

	EmpID	EmpName	EmpSalary	DeptID
Edit	1	Brinda	25000	1
Edit	3	Jay	2500	3
Edit	4	Yesha	1000	3
Edit	5	Merra	100	1
Edit	7	Rekha	45000	5

Below the table, there are buttons for 'Check all' and 'With selected:' followed by 'Edit', 'Copy', 'Delete', and 'Export' options.

DeptTB

localhost / localhost / Ass2 / DeptTB | phpMyAdmin 4.5.4.1deb2ubuntu2.1 - Mozilla Firefox

DeptTB

DeptID	DeptName
1	IT
3	HR
5	Accounting

Query results operations

Print view Export Display chart Create view

SaleTB

localhost / localhost / Ass2 / Sale | phpMyAdmin 4.5.4.1deb2ubuntu2.1 - Mozilla Firefox

Sale

SaleID	EmpID	ItemID	CustomerID	StoreID
1100	1	301	1001	101
1101	2	302	1002	102

Query results operations

Print view Export Display chart Create view