

PARTIAL Exam 2 Reference Packet

Example 1 - PrepStmtEx.java excerpt (with comments removed):

```

PreparedStatement pStmt = con.prepareStatement
    ("insert into table_from_java " +
     "values " +
     "(?, sysdate, ?, ?, ?)");

con.setAutoCommit(false);
int numRows = colors.length;

for (int i=0; i<numRows; i++)
{
    pStmt.setInt(1, nextPK);
    nextPK++;
    pStmt.setString(2, colors[i]);
    pStmt.setInt(3, codes[i]);
    pStmt.setDouble(4, deposits[i]);

    pStmt.executeUpdate();
}

con.commit();

```

Example 2 - St10CommonImportTop.jsp (with comments removed)

```

<!DOCTYPE html>
<html>
<head>
    <title> <%= pageTitle %> </title>
    <meta charset="utf-8" />

    <%@ page import="java.sql.*, java.text.*" %>
</head>
<body>
    <h1> <%= pageTitle %> </h1>

```

Example 3 - St10Sessions1.jsp

```

<%! String pageTitle = "Sessions page 1 in-class"; %>
<%@ include file="St10CommonTop.jsp" %>

<ul>
    <li> is the automatically-defined session new?:
        <%= session.isNew() %> </li>
    <li> trying to set an attribute for this session:
        attribute page_num, value 1;

        <%-- look! auto-boxing DOES work for session
            attributes?? --%>

        <% session.setAttribute("page_num", 1); %>
    </li>

```

```

    <li> max inactive interval:
        <%= session.getMaxInactiveInterval() %> </li>
</ul>

<form action=
"http://nrs-projects.humboldt.edu:8888/examples/jsp/student/St10Sessions2.jsp"
  method="post">
  <label> Name: <input type="text" name="username" /> </label> <br />
  <input type="submit" value="Submit" />
</form>

<%@ include file="St10CommonBottom.jsp" %>

```

Example 4 - Excerpt from St10Sessions2.jsp

```

<tr>
  <td> session attribute page_num: set? </td>
  <td> <%= session.getAttribute("page_num") %> </td>
</tr>
...
<tr>
  <td> username grabbed from page 1 form: </td>
  <td> <%! String userName; %>
    <% userName = request.getParameter("username"); %>
    <%= userName %>
  </td>
</tr>

```

Example 5 - CallHowMany.java excerpt (with comments removed):

```

CallableStatement cStmt =
    con.prepareCall("begin ? := how_many(?); end;");

cStmt.registerOutParameter(1, java.sql.Types.INTEGER);
cStmt.setString(2, args[0]);
cStmt.execute();

System.out.println("Have " + cStmt.getInt(1)
    + " copies of " + args[0]);

pStmt.close();
con.close();

```

Example 6 - SpewTableColumns.java excerpt (with comments removed):

```

Statement stmt = con.createStatement();
String query = "select * " +
    "from " + whichTable;
ResultSet rS = stmt.executeQuery(query);

ResultSetMetaData md = rS.getMetaData();
int columnCt = md.getColumnCount();
System.out.println();

for (int i=1; i<= columnCt; i++)
{
    System.out.println( md.getColumnLabel(i));
}

```

Example 7 - excerpt from empsal.html

```
<body>
  <h1>Form for St10EmpSal servlet</h1>

  <form method="post"
        action="http://nrs-projects.humboldt.edu:8888/servlet/St10EmpSal">
```

Example 8 - edited St10EmpSal.java (comments removed)

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
import java.sql.*;

public class St10EmpSal extends HttpServlet
{
    private String username;
    private String password;

    public void doPost(HttpServletRequest request,
                       HttpServletResponse response)
        throws ServletException, IOException
    {
        response.setContentType("text/html");
        ServletOutputStream out = response.getOutputStream();

        username = request.getParameter("username");
        password = request.getParameter("password");

        Html318Helpers.beginHtml(out, "EmpSal Servlet");
        grabEmpSalFromDatabase(out);
        Html318Helpers.endHtml(out);
    }

    private void grabEmpSalFromDatabase(ServletOutputStream outputStream)
        throws IOException
    {
        String eName;
        int    eSal;

        try
        {
            System.setProperty("java.net.preferIPv4Stack", "true");
            Class.forName("oracle.jdbc.driver.OracleDriver");

            Connection con = DriverManager.getConnection(
                "jdbc:oracle:thin:@cedar:1521:student",
                username, password);

            Statement stmt = con.createStatement();
            String query = "select empl_last_name, salary " +
                "from empl";
            ResultSet rS = stmt.executeQuery(query);
            outputStream.println("");
        }
    }
}
```

```

    outputStream.println("<h1>Employees and their salaries</h1>");
    outputStream.println("<table>");
    outputStream.println("<tr> <th> Employee Last Name </th>");
    outputStream.println("      <th> Employee Salary </th> </tr>");

    while (rs.next())
    {
        eName = rs.getString(1);
        eSal = rs.getInt(2);

        outputStream.println("<tr> <td> " + eName + " </td>");
        outputStream.println("      <td> $" + eSal + " </td> </tr>");
    }
    outputStream.println("</table>");
    stmt.close();
    con.close();
}
catch (Exception e)
{
    outputStream.println("<p> " + e + "</p>");
}
}
}

```

Example 9 - StoredProcCall.java excerpt (with comments removed):

```

CallableStatement cstmt = con.prepareCall(
    "{call SP_FROM_JAVA(?, ?, ?, ?, ?)}");

cstmt.registerOutParameter(1, java.sql.Types.INTEGER);
cstmt.registerOutParameter(2, java.sql.Types.CHAR);
cstmt.setInt(3, 20);
cstmt.setString(4, "red");
cstmt.registerOutParameter(5, java.sql.Types.INTEGER);

cstmt.execute();

System.out.println("Stored Proc OUT params:");
System.out.println("Out Parameter 1: " + cstmt.getInt(1));
String outParam2 = cstmt.getString(2).trim();
System.out.println("Out Parameter 2: " + outParam2);
System.out.println("Out Parameter 5: " + cstmt.getInt(5));

```