3.Demonstrate Connection, Statement, and ResultSet in JDBC.

DBConnection:

```java
package com.ecommerce;


import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;

public class DBConnection {

        private Connection connection;

        public DBConnection(String dbURL, String user, String pwd)
throws ClassNotFoundException, SQLException{

                Class.forName("com.mysql.jdbc.Driver");
                this.connection = DriverManager.getConnection(dbURL,
user, pwd);
        }

        public Connection getConnection(){
                return this.connection;
        }

        public void closeConnection() throws SQLException {
                if (this.connection != null)
                        this.connection.close();
        }
}

Product detail:

package com.ecommerce;

import java.io.IOException;
import java.io.InputStream;
import java.io.PrintWriter;

import java.sql.ResultSet;
import java.sql.SQLException;
import java.sql.Statement;
import java.util.Properties;

import jakarta.servlet.ServletException;
import jakarta.servlet.annotation.WebServlet;
```

```java
import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
import jakarta.servlet.http.HttpServletResponse;




/**
 * Servlet implementation class ProductDetails
 */
@WebServlet("/ProductDetails")
public class ProductDetails extends HttpServlet {
        private static final long serialVersionUID = 1L;

    /**
 * @see HttpServlet#HttpServlet()
 */
    public ProductDetails() {
        super();
        // TODO Auto-generated constructor stub
    }

        /**
         * @see HttpServlet#doGet(HttpServletRequest request,
HttpServletResponse response)
         */
        protected void doGet(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
                // TODO Auto-generated method stub

                try {
                        PrintWriter out = response.getWriter();
                        out.println("<html><body>");

                        InputStream in =
getServletContext().getResourceAsStream("/WEB-INF/config.properties");
                        Properties props = new Properties();
                        props.load(in);

                        DBConnection conn = new
DBConnection(props.getProperty("url"), props.getProperty("userid"),
props.getProperty("password"));
                        Statement stmt =
conn.getConnection().createStatement(ResultSet.TYPE_SCROLL_INSENSITIVE,
ResultSet.CONCUR_READ_ONLY);
                        stmt.executeUpdate("insert into eproduct (name,
price, date_added) values ('New Product', 17800.00, now())");
                        ResultSet rst = stmt.executeQuery("select *
from eproduct");

                        while (rst.next()) {
```

```java
                                out.println(rst.getInt("ID") + ", " +
rst.getString("name") + "<Br>");
                                }

                                stmt.close();


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

                        } catch (ClassNotFoundException e) {
                                e.printStackTrace();
                        } catch (SQLException e) {
                                e.printStackTrace();
                        }
                }

                /**
                 * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse response)
                 */
                protected void doPost(HttpServletRequest request,
HttpServletResponse response) throws ServletException, IOException {
                        // TODO Auto-generated method stub
                        doGet(request, response);
                }

}
```

Classpath:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<classpath>
        <classpathentry kind="src" path="src/main/java"/>
        <classpathentry kind="con"
path="org.eclipse.jdt.launching.JRE_CONTAINER/org.eclipse.jdt.internal.
debug.ui.launcher.StandardVMType/JavaSE-17">
                <attributes>
                        <attribute name="module" value="true"/>
                </attributes>
        </classpathentry>
        <classpathentry kind="con"
path="org.eclipse.jst.server.core.container/org.eclipse.jst.server.tomc
at.runtimeTarget/Apache Tomcat v10.1">
                <attributes>
                        <attribute name="owner.project.facets"
value="jst.web"/>
                </attributes>
        </classpathentry>
```

```xml
        <classpathentry kind="con"
path="org.eclipse.jst.j2ee.internal.web.container"/>
        <classpathentry kind="con"
path="org.eclipse.jst.j2ee.internal.module.container"/>
        <classpathentry kind="lib"
path="D:/mysql-connector-j-8.0.33.jar"/>
        <classpathentry kind="output" path="build/classes"/>
</classpath>
```

Proj descr:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<projectDescription>
        <name>JDBCSetup1</name>
        <comment></comment>
        <projects>
        </projects>
        <buildSpec>
                <buildCommand>
                        <name>org.eclipse.jdt.core.javabuilder</name>
                        <arguments>
                        </arguments>
                </buildCommand>
                <buildCommand>

<name>org.eclipse.wst.common.project.facet.core.builder</name>
                        <arguments>
                        </arguments>
                </buildCommand>
                <buildCommand>

<name>org.eclipse.wst.validation.validationbuilder</name>
                        <arguments>
                        </arguments>
                </buildCommand>
        </buildSpec>
        <natures>
                <nature>org.eclipse.jem.workbench.JavaEMFNature</nature>

<nature>org.eclipse.wst.common.modulecore.ModuleCoreNature</nature>

<nature>org.eclipse.wst.common.project.facet.core.nature</nature>
                <nature>org.eclipse.jdt.core.javanature</nature>
                <nature>org.eclipse.wst.jsdt.core.jsNature</nature>
        </natures>
</projectDescription>
```
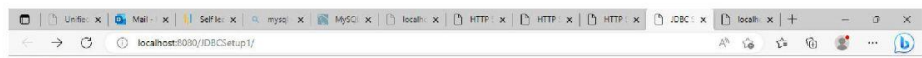
Output:

[Product Info](#)

1, HP Laptop ABC
2, Acer Laptop ABC
3, Lenevo Laptop ABC
4, New Product
5, New Product