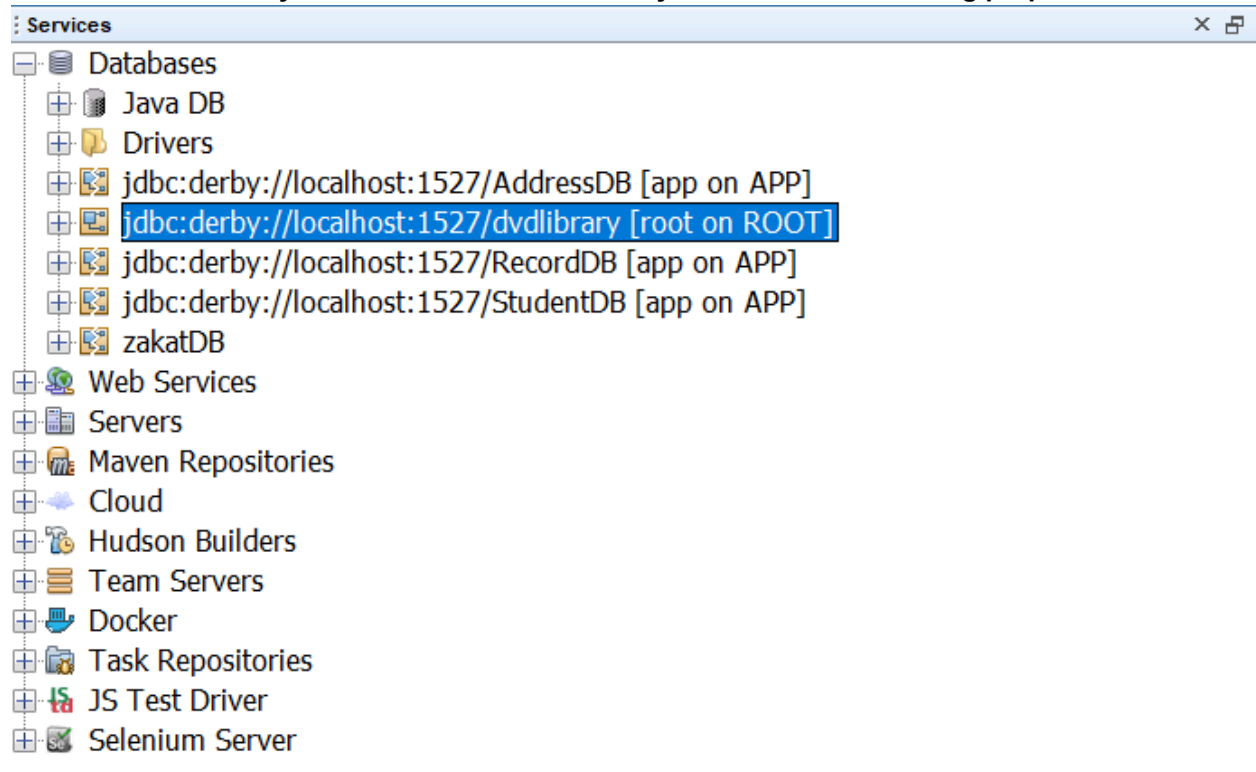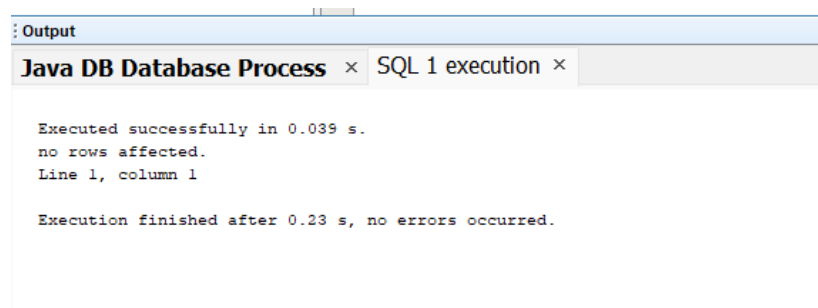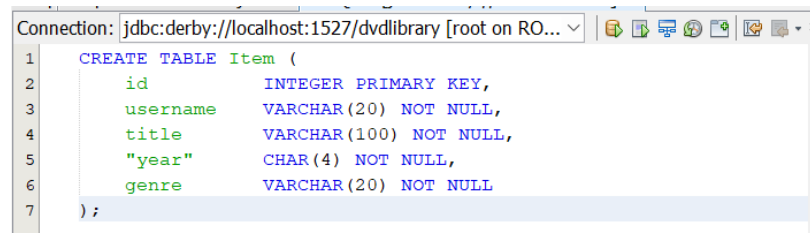# Post LAB 9: Integrating JSP with a database

**Task 1: Start the Derby database. Create a dvdlibrary database with following properties**



**Task 2: Create a table name ITEM by executing the following SQL command.**

```
Connection: jdbc:derby://localhost:1527/dvdlibrary [root on RO...]
1    CREATE TABLE Item (
2        id           INTEGER PRIMARY KEY,
3        username     VARCHAR(20) NOT NULL,
4        title        VARCHAR(100) NOT NULL,
5        "year"       CHAR(4) NOT NULL,
6        genre        VARCHAR(20) NOT NULL
7    );
```

**Output**

**Java DB Database Process** ×   SQL 1 execution ×

```
Executed successfully in 0.039 s.
no rows affected.
Line 1, column 1

Execution finished after 0.23 s, no errors occurred.
```

**Task 3: Populate the table with values through SQL command.**

```sql
INSERT INTO Item VALUES(1, 'jack', 'The Godfather', '1972', 'Drama');
INSERT INTO Item VALUES(2, 'jack', 'The ShanwsShark Redemption', '1994', 'Drama');
INSERT INTO Item VALUES(3, 'jack', 'The Godfather: Part II', '1974', 'Drama');
INSERT INTO Item VALUES(4, 'jack', 'The Lord of the Rings: The Return of The King', '2003', 'Fantasy');
INSERT INTO Item VALUES(5, 'jack', 'The Lord of the Rings: The Two Towers', '2002', 'Fantasy');
INSERT INTO Item VALUES(6, 'jack', 'Shindler`s List', '1998', 'Drama');
INSERT INTO Item VALUES(7, 'jack', 'Shichinin no samurai', '1954', 'Action');
INSERT INTO Item VALUES(8, 'jack', 'Casablanca', '1942', 'Drama');
INSERT INTO Item VALUES(9, 'jack', 'The Lord of the Rings: The Fellowship of The Ring', '2001', 'Fantasy');
```

Output ×

**Java DB Database Process** ×   **SQL 1 execution** ×

```
Executed successfully in 0.002 s.
1 row affected.
Line 7, column 1


Executed successfully in 0.002 s.
1 row affected.
Line 8, column 1


Executed successfully in 0.002 s.
1 row affected.
Line 9, column 1

Execution finished after 0.058 s, no errors occurred.
```
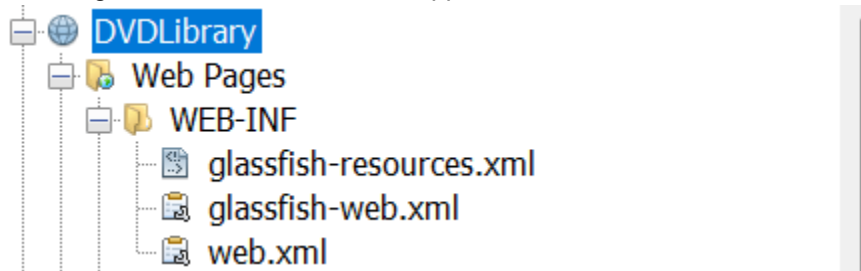
**Task 4: Perform the following steps:**

1. Configure the Data source in the deployment descriptor
2. Configure the data source in the application server

DVDLibrary
  Web Pages
    WEB-INF
      glassfish-resources.xml
      glassfish-web.xml
      web.xml

**Add Resource Reference**                    ✕

Resource Name:    jdbc/myDatasource

Resource Type:    javax.sql.DataSource          ⌄

Authentication:   Container                     ⌄

Sharing Scope:    Shareable                     ⌄

Description:

                          OK        Cancel

General | Servlets | Security | Web Services | Messaging | Environment | XML | History

```
1   <?xml version="1.0" encoding="UTF-8"?>
2   <!DOCTYPE glassfish-web-app PUBLIC "-//GlassFish.org//DTD GlassFish Application Server 3.1 Servlet 3.0//EN" "http://glassfish.org/dtds/glassfish-web-app_3_0-1.dtd">
3   <glassfish-web-app error-url="">
4       <context-root>/DBExample</context-root>
5       <class-loader delegate="true"/>
6       <jsp-config>
7           <property name="keepgenerated" value="true">
8               <description>Keep a copy of the generated servlet class' java code.</description>
9           </property>
10      </jsp-config>
11      <reaource-ref>
12          <res-ref-name>jdbc/myDatasource</res-ref-name>
13          <jndi-name>jdbc/myDatasource</jndi-name>
14      </reaource-ref>
15  </glassfish-web-app>
16
```

3. Create a new JSP file as selectData.jsp. Write JSP/ JSTL code to display the data from database as follow:

```
DVDLibrary
  Web Pages
    WEB-INF
      glassfish-resources.xml
      glassfish-web.xml
      web.xml
    add_dvd.html
    add_dvd.jsp
    error.jsp
    errorJSTL.jsp
    index.html
    list_library.jsp
    list_libraryJSTL.jsp
    selectData.jsp
    success.jsp
    successJSTL.jsp
```

# My DVD Collection

You currently have **9** DVDs in your collection:

| The Godfather | The ShanwsShark Redemption | The Godfather: Part II |
|---|---|---|
| Year: 1972 | Year: 1994 | Year: 1974 |
| Genre: Drama | Genre: Drama | Genre: Drama |

| The Lord of the Rings: The Return of The King | The Lord of the Rings: The Two Towers | Shindler`s List |
|---|---|---|
| Year: 2003 | Year: 2002 | Year: 1998 |
| Genre: Fantasy | Genre: Fantasy | Genre: Drama |

| Shichinin no samurai | Casablanca | The Lord of the Rings: The Fellowship of The Ring |
|---|---|---|
| Year: 1954 | Year: 1942 | Year: 2001 |
| Genre: Action | Genre: Drama | Genre: Fantasy |

End of list...