

### Execution Steps:

On unzipping the package Assinment3\_W1351349.zip, we will find createdb.sql, dropdb.sql, MovieDB folder and MovieDBfile.

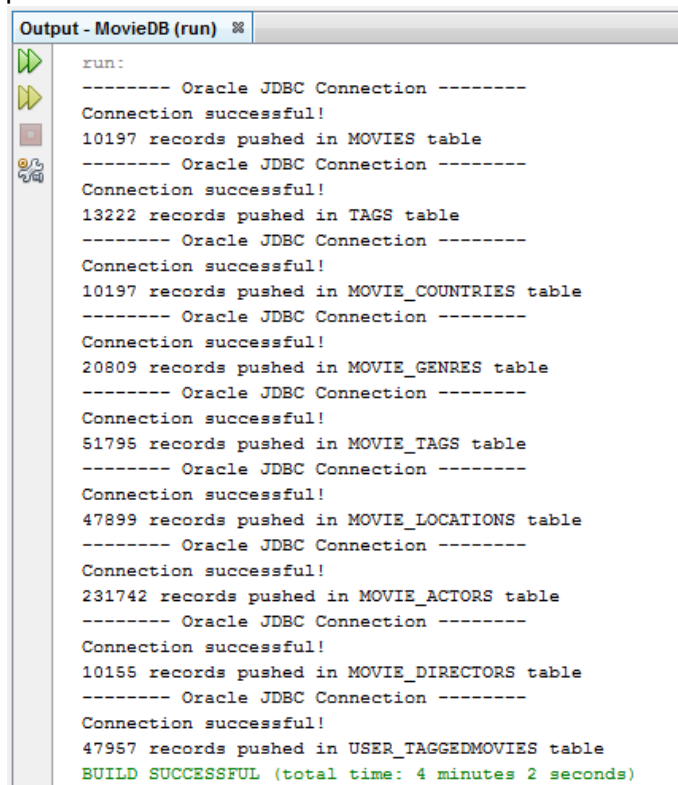
1. After installing oracle, give the below commands,

```
> sqlplus
.....Enter username and password.....
SQL> DEFINE _EDITOR = notepad
SQL> EDIT createdb
-----copy and paste the contents of createdb.sql in the notepad, and save-----
SQL> @createdb
```

2. If we are using netbeans, go to **File → Import Projects → From Zip**, navigate to the MovieDBfile from the unzipped package and click OK. Click resolve dependencies and add the ojdbc7 jar to the project from *MovieDB → bin* folder.
3. If we are using command prompt, use cd command and navigate to MovieDB folder and perform the below command to populate data into the DB.

```
C:\Users\VS\Desktop> java -classpath bin/ojdbc7.jar build/classes/populate
./data/movies.dat ./data/tags.dat ./movie_countries.dat
./data/movie_genres.dat ./data/movie_tags.dat ./data/movie_locations.dat
./data/movie_actors.dat ./data/movie_directors.dat
./data/user_taggedmovies.dat
```

4. The output appears as follows.



```
Output - MovieDB (run) %
run:
----- Oracle JDBC Connection -----
Connection successful!
10197 records pushed in MOVIES table
----- Oracle JDBC Connection -----
Connection successful!
13222 records pushed in TAGS table
----- Oracle JDBC Connection -----
Connection successful!
10197 records pushed in MOVIE_COUNTRIES table
----- Oracle JDBC Connection -----
Connection successful!
20809 records pushed in MOVIE_GENRES table
----- Oracle JDBC Connection -----
Connection successful!
51795 records pushed in MOVIE_TAGS table
----- Oracle JDBC Connection -----
Connection successful!
47899 records pushed in MOVIE_LOCATIONS table
----- Oracle JDBC Connection -----
Connection successful!
231742 records pushed in MOVIE_ACTORS table
----- Oracle JDBC Connection -----
Connection successful!
10155 records pushed in MOVIE_DIRECTORS table
----- Oracle JDBC Connection -----
Connection successful!
47957 records pushed in USER_TAGGEDMOVIES table
BUILD SUCCESSFUL (total time: 4 minutes 2 seconds)
```

5. Now, run Hw3.java using the below command

```
C:\Users\VS\Desktop> java -classpath bin/ojdbc7.jar build/classes/Hw3
```

6. Initial output window appears as follows.

The screenshot shows the 'Movie DB Application' window. It features a main 'Options' section with a 'Genres' list (Action, Adventure, Animation, Children, Comedy, Crime, Documentary, Drama, Fantasy), 'Country', 'Actors', 'Directors', and 'Tags' input fields. Below these are 'From:' and 'To:' year input fields, 'Next >>' buttons, and a 'Search Between' dropdown set to 'AND'. The bottom section is the 'Query Area' with 'Movies Query' and 'Users Query' text areas, and 'Execute Movies Query' and 'Execute Users Query' buttons. On the right, there are three stacked panels: 'Movie Results' with 'More ..' and 'Next >>' buttons, 'Description' with a text area, and 'User Results' with a 'User IDs' list and a 'Clear Selection' button.

7. After selecting *genre(s)* and entering *from* & *to* years, click Next >> to populate countries.

The screenshot shows the 'Movie DB Application' window. In the 'Options' section, the 'Genres' list has 'Drama' selected. The 'Country' list is empty. The 'Actors' and 'Directors' lists are also empty. The 'Tags' list is empty. The 'From' and 'To' date fields are set to 2000 and 2017 respectively. The 'Search Between' dropdown is set to 'AND'. There are four 'Next >>' buttons corresponding to the Genres, Country, Actors, and Tags lists. The 'Query Area' has two empty text boxes for 'Movies Query' and 'Users Query', each with an 'Execute' button below it. On the right, the 'Movie Results' section is empty with 'More ..' and 'Next >>' buttons. The 'Description' section is empty. The 'User Results' section shows 'User IDs' with a 'Clear Selection' button.

8. After selecting *country/countries*, click Next >> to populate actors and directors.

The screenshot shows the 'Movie DB Application' window after selecting 'USA' in the 'Country' list. The 'Actors' list is now populated with: 'Stone Cold' Steve Au, 3rd Storee, 50 Cent, ??lodie Bouchez#958, A. Delon Ellis Jr., A. Doran Reed. The 'Directors' list is also populated with: A. Dean Bell, Aaron Katz, Abdul Malik Abbott. The 'From' and 'To' date fields remain 2000 and 2017. The 'Search Between' dropdown is still 'AND'. The 'Next >>' buttons are still present. The 'Query Area' and the right-hand result sections remain the same as in the previous screenshot.

9. After selecting *actor(s)/director(s)*, click Next >> to populate tags.

The screenshot shows the 'Movie DB Application' window. The 'Options' panel at the top has four columns: Genres (Action, Adventure, Animation, Children, Comedy, Crime, Documentary, Drama, Fantasy), Country (South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, UK, USA, Venezuela), Actors ('Stone Cold' Steve Au, 3rd Storee, 50 Cent, ??Iodie Bouchez#958, A. Delon Ellis Jr., A. Doran Reed), and Tags (12299, dream sequence). Below these are 'From' (2000) and 'To' (2017) date pickers, and a 'Search Between' dropdown set to 'AND'. Each column has a 'Next >>' button. The 'Query Area' at the bottom has two empty text boxes for 'Movies Query' and 'Users Query', each with an 'Execute' button. On the right, there are three panels: 'Movie Results' (empty), 'Description' (empty), and 'User Results' (containing 'User IDs' and a 'Clear Selection' button).

10. After selecting *tag(s)*, click Next >> to populate the movies query in the bottom panel.

This screenshot is identical to the previous one, except the 'Movies Query' text box in the 'Query Area' is now populated with the following SQL query:  

```
SELECT movieid, title FROM movies WHERE movieid  
IN ((SELECT movieid FROM movie_genres WHERE  
genre = 'Drama') INTERSECT (SELECT movieid  
FROM movie_countries WHERE country = 'USA')  
INTERSECT (SELECT movieid FROM  
movie_directors WHERE directormame = 'Tom  
DiCillo') INTERSECT (SELECT movieid FROM  
movie_tags WHERE tagid = 12299) INTERSECT
```

11. Click on “Execute Movies Query” to see a list of movies.

The screenshot shows the 'Movie DB Application' window. The 'Options' section on the left contains several lists: Genres (Action, Adventure, Animation, Children, Comedy, Crime, Documentary, Drama, Fantasy), Country (South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, UK, USA, Venezuela), Actors ('Stone Cold' Steve Au, 3rd Storee, 50 Cent, ??Iodie Bouchez#958, A. Delon Ellis Jr., A. Doran Reed), and Tags (12299, dream sequence). Below these lists are 'From:' (2000) and 'To:' (2017) input fields, and a 'Search Between' dropdown set to 'AND'. The 'Query Area' section contains two text boxes: 'Movies Query' with a complex SQL query and 'Users Query' which is empty. Below the 'Movies Query' box is an 'Execute Movies Query' button, and below the 'Users Query' box is an 'Execute Users Query' button. On the right side of the window, there are three panels: 'Movie Results' showing '6010, Double Whammy' with 'More ..' and 'Next >>' buttons; 'Description' which is empty; and 'User Results' showing 'User IDs' with a 'Clear Selection' button.

12. Select a movie and click on more button to see the description below the movie results pane.

This screenshot is similar to the previous one, but the 'Description' pane on the right is now populated with details for the selected movie. The details include: 'Movie ID -- 6010', 'Movie Title -- Double Whammy', 'Release Year -- 2001', 'Avg RT Audience Rating -- 0.0', and 'Number of RT Rated Audience -- (Genre -- Action, Comedy, Drama, ...'. The 'Movie Results' pane still shows '6010, Double Whammy' with 'More ..' and 'Next >>' buttons. The 'User Results' pane shows 'User IDs' with a 'Clear Selection' button. The 'Options' and 'Query Area' sections remain the same as in the previous screenshot.

13. Select movies and click Next >> in the movie results pane to generate the users query.

Movie DB Application

Options

Genres: Action, Adventure, Animation, Children, Comedy, Crime, Documentary, **Drama**, Fantasy

Country: South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, UK, **USA**, Venezuela

Actors: 'Stone Cold' Steve Au, 3rd Storee, 50 Cent, ??lodie Bouchez#958, A. Delon Ellis Jr., A. Doran Reed

Tags: **12299, dream sequence**

From: 2000 To: 2017

Search Between: AND

Movie Results: 6010, Double Whammy

Description: Movie ID -- 6010, Movie Title -- Double Whammy, Release Year -- 2001, Avg RT Audience Rating -- 0.0, Number of RT Rated Audience -- 0, Genre -- Action, Comedy, Drama

User Results: User IDs

Query Area

Movies Query: SELECT movieid, title FROM movies WHERE movieid IN ((SELECT movieid FROM movie\_genres WHERE genre = 'Drama') INTERSECT (SELECT movieid FROM movie\_countries WHERE country = 'USA') INTERSECT (SELECT movieid FROM movie\_directors WHERE directorname = 'Tom DiCillo') INTERSECT (SELECT movieid FROM movie\_tags WHERE tagid = 12299) INTERSECT

Users Query: SELECT userid from user\_taggedmovies where movieid IN (SELECT movieid FROM movies WHERE movieid = 6010) AND tagid IN (SELECT tagid FROM movie\_tags WHERE tagid = 12299)

Execute Movies Query, Execute Users Query

14. Now, click on the *Execute Users Query* button, the *userid*s of the users who tagged the selected tags (in step 10) for the selected movies (in the previous step)

Movie DB Application

Options

Genres: Action, Adventure, Animation, Children, Comedy, Crime, Documentary, **Drama**, Fantasy

Country: South Korea, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, UK, **USA**, Venezuela

Actors: 'Stone Cold' Steve Au, 3rd Storee, 50 Cent, ??lodie Bouchez#958, A. Delon Ellis Jr., A. Doran Reed

Tags: **12299, dream sequence**

From: 2000 To: 2017

Search Between: AND

Movie Results: 6010, Double Whammy

Description: Movie ID -- 6010, Movie Title -- Double Whammy, Release Year -- 2001, Avg RT Audience Rating -- 0.0, Number of RT Rated Audience -- 0, Genre -- Action, Comedy, Drama

User Results: User IDs: 788

Query Area

Movies Query: SELECT movieid, title FROM movies WHERE movieid IN ((SELECT movieid FROM movie\_genres WHERE genre = 'Drama') INTERSECT (SELECT movieid FROM movie\_countries WHERE country = 'USA') INTERSECT (SELECT movieid FROM movie\_directors WHERE directorname = 'Tom DiCillo') INTERSECT (SELECT movieid FROM movie\_tags WHERE tagid = 12299) INTERSECT

Users Query: SELECT userid from user\_taggedmovies where movieid IN (SELECT movieid FROM movies WHERE movieid = 6010) AND tagid IN (SELECT tagid FROM movie\_tags WHERE tagid = 12299)

Execute Movies Query, Execute Users Query

15. Clear Selection button allows us to start over with a new search.

16. Once done, we need to drop the tables. Use the below commands to do the same.

```
> sqlplus
.....Enter username and password.....
SQL> DEFINE _EDITOR = notepad
SQL> EDIT dropdb
-----copy and paste the contents of dropdb.sql in the notepad, and save-----
SQL> @dropdb
```