

PROGRAM 9: MOVIE DATABASE

Consider the schema for Movie Database:

ACTOR(Act_id, Act_Name, Act_Gender)

DIRECTOR(Dir_id, Dir_Name, Dir_Phone)

MOVIES(Mov_id, Mov_Title, Mov_Year, Mov_Lang, Dir_id)

MOVIE_CAST(Act_id, Mov_id, Role)

RATING(Mov_id, Rev_Stars)

Write SQL queries to

- i. List the titles of all movies directed by 'Hitchcock'.
- ii. Find the movie names where one or more actors acted in two or more movies.
- iii. List all actors who acted in a movie before 2000 and also in a movie after 2015 (use JOIN operation).
- iv. Find the title of movies and number of stars for each movie that has at least one rating and find the highest number of stars that movie received. Sort the result by movie title.
- v. Update rating of all movies directed by 'Steven Spielberg' to 5.

create database movie;

use movie;

CREATE TABLE ACTOR(ACT_ID INT, ACT_NAME VARCHAR(10), ACT_GENDER VARCHAR(10), PRIMARY KEY(ACT_ID));

CREATE TABLE DIRECTOR(DIR_ID INT, DIR_NAME VARCHAR(10), DIR_PHONE INT, PRIMARY KEY(DIR_ID));

CREATE TABLE MOVIES(MOV_ID INT, MOV_TITLE VARCHAR(10), MOV_YEAR VARCHAR(10), MOV_LANG VARCHAR(10), DIR_ID INT, PRIMARY KEY(MOV_ID), FOREIGN KEY(DIR_ID) REFERENCES DIRECTOR(DIR_ID));

CREATE TABLE MOVIE_CAST(ACT_ID INT, MOV_ID INT, ROLE_PLAYED VARCHAR(10), FOREIGN KEY(ACT_ID) REFERENCES ACTOR(ACT_ID), FOREIGN KEY(MOV_ID) REFERENCES MOVIES(MOV_ID));

CREATE TABLE RATING(MOV_ID INT, REV_STARS FLOAT, FOREIGN KEY(MOV_ID) REFERENCES MOVIES(MOV_ID));

i. List the titles of all movies directed by 'Hitchcock'.

```
SELECT D.DIR_NAME,M.MOV_TITLE FROM DIRECTOR D,MOVIES M WHERE  
D.DIR_ID=M.DIR_ID AND D.DIR_NAME='Hitchcock';
```

ii. Find the movie names where one or more actors acted in two or more movies.

```
SELECT M.MOV_TITLE FROM MOVIES M,MOVIE_CAST MC WHERE  
M.MOV_ID=MC.MOV_ID AND MC.ACT_ID IN(SELECT ACT_ID FROM MOVIE_CAST  
GROUP BY ACT_ID HAVING COUNT(*)>1) GROUP BY M.MOV_TITLE HAVING  
COUNT(*)>1;
```

iii. List all actors who acted in a movie before 2000 and also in a movie after 2015 (use JOIN operation).

```
SELECT ACT_NAME FROM (MOVIES NATURAL JOIN MOVIE_CAST) NATURAL  
JOIN ACTOR WHERE MOV_YEAR>2015 OR MOV_YEAR<2000;
```

iv. Find the title of movies and number of stars for each movie that has at least one rating and find the highest number of stars that movie received. Sort the result by movie title.

```
SELECT M.MOV_TITLE,MAX(R.REV_STARS) AS MAX_RATING FROM MOVIES  
M,RATING R WHERE M.MOV_ID=R.MOV_ID GROUP BY R.MOV_ID ORDER BY  
M.MOV_TITLE;
```

v. Update rating of all movies directed by 'Steven Spielberg' to 5.

```
UPDATE RATING SET REV_STARS=5 WHERE MOV_ID IN (SELECT M.MOV_ID  
FROM MOVIES M,DIRECTOR D WHERE M.DIR_ID=D.DIR_ID AND  
D.DIR_NAME='Steven');  
SELECT * FROM RATING;
```