Case Study

Section A

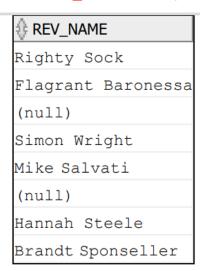1. Create Database project_movie_data and deploy table data according to ER diagram.
2. Create 9 tables which are presented in ER model and load the data with their foreign key and primary key values.
3. Write a query in SQL to list the Horror movies?

   SELECT MOV_TITLE FROM MOVIE WHERE MOV_ID =(SELECT MOV_ID FROM MOVIE_GENRES WHERE GEN_ID = (SELECT GEN_ID FROM GENRES WHERE GEN_TITLE = 'Horror'));

MOV_TITLE
The Innocents

4. Write a query in SQL to find the name of all reviewers who have rated 8 or more stars?

   SELECT REV_NAME FROM REVIEWER WHERE REV_ID IN (SELECT REV_ID FROM RATING WHERE REV_STARS > = 8);

REV_NAME
Righty Sock
Flagrant Baronessa
(null)
Simon Wright
Mike Salvati
(null)
Hannah Steele
Brandt Sponseller

5. Write a query in SQL to list all the information of the actors who played a role in the movie 'Deliverance'.

SELECT * FROM ACTOR WHERE ACT_ID = (SELECT ACT_ID FROM MOVIE_CAST
WHERE MOV_ID=(SELECT MOV_ID FROM MOVIE WHERE
MOV_TITLE='Deliverance'));

ACT_ID	ACT_FNAME	ACT_LNAME	ACT_GENDER
117	Jon	Voight	M

6. Write a query in SQL to find the name of the director (first and last names) who directed a movie that casted a role for 'Eyes Wide Shut'. (using subquery)

SELECT DIR_FNAME, DIR_LNAME FROM DIRECTOR
WHERE DIR_ID = (SELECT DIR_ID FROM MOVIE_DIRECTION
WHERE MOV_ID = (SELECT MOV_ID FROM MOVIE WHERE MOV_TITLE
='Eyes Wide Shut'));

DIR_FNAME	DIR_LNAME
Stanley	Kubrick

7. Write a query in SQL to find the movie title, year, date of release, director and actor for those movies which reviewer is 'Neal Wruck'

```sql
SELECT M.MOV_TITLE, M.MOV_YEAR, M.MOV_DT_REL,
CONCAT (D.DIR_FNAME,D.DIR_LNAME) AS DIR_NAME,
CONCAT(A.ACT_FNAME,A.ACT_LNAME) AS ACT_NAME
FROM ACTOR A NATURAL JOIN MOVIE_CAST MC
NATURAL JOIN MOVIE M NATURAL JOIN
MOVIE_DIRECTION MD NATURAL JOIN DIRECTOR D
NATURAL JOIN MOVIE_DIRECTION MD
NATURAL JOIN RATING R NATURAL JOIN REVIEWER W
WHERE W.REV_NAME='Neal Wruck';
```


```sql
SELECT MOV_TITLE, MOV_YEAR, MOV_DT_REL,
CONCAT(DIR_FNAME, DIR_LNAME) DIRECTORNAME,
CONCAT(ACT_FNAME, ACT_LNAME) ACTORNAME
FROM MOVIE A, MOVIE_DIRECTION B, DIRECTOR C,
RATING D, REVIEWER E, ACTOR F, MOVIE_CAST G
WHERE A.MOV_ID=B.MOV_ID
AND  B.DIR_ID=C.DIR_ID
AND A.MOV_ID=D.MOV_ID
AND  D.REV_ID=E.REV_ID
AND  A.MOV_ID=G.MOV_ID
AND G.ACT_ID=F.ACT_ID
AND E.REV_NAME = 'Neal Wruck';
```

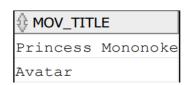| MOV_TITLE	MOV_YEAR	MOV_DT_REL	DIRECTORNAME	ACTORNAME
Chinatown	1974	09-AUG-74	RomanPolanski	JackNicholson

8. Write a query in SQL to find all the years which produced at least one movie and that received a rating of more than 4 stars.

SELECT DISTINCT MOV_YEAR FROM MOVIE
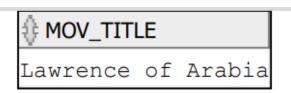WHERE MOV_ID IN (SELECT MOV_ID FROM RATING
WHERE REV_STARS>4);

MOV_YEAR
1997
1986
2009
1982
1999
2001
1962
1977
1958
1995
2004
1961
2008

9. Write a query in SQL to find the name of all movies who have rated their ratings with a NULL value

SELECT MOV_TITLE FROM MOVIE WHERE MOV_ID IN (SELECT MOV_ID FROM RATING WHERE NUM_O_RATINGS IS NULL);
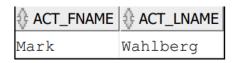
MOV_TITLE
Princess Mononoke
Avatar

10. Write a query in SQL to find the name of movies who were directed by 'David'

SELECT MOV_TITLE FROM MOVIE
WHERE MOV_ID IN (SELECT MOV_ID FROM MOVIE_DIRECTION
WHERE DIR_ID IN (SELECT DIR_ID FROM DIRECTOR WHERE
DIR_FNAME ='DAVID' OR DIR_LNAME = 'David'));

MOV_TITLE
Lawrence of Arabia

11. Write a query in SQL to list the first and last names of all the actors who were cast in the movie 'Boogie Nights', and the roles they played in that production.

SELECT ACT_FNAME,ACT_LNAME FROM ACTOR
WHERE ACT_ID IN (SELECT ACT_ID FROM MOVIE_CAST WHERE MOV_ID IN
(SELECT MOV_ID
FROM MOVIE WHERE MOV_TITLE ='The Boogie Nights'));

ACT_FNAME	ACT_LNAME
Mark	Wahlberg

12. Find the name of the actor who have worked in more than one movie.

SELECT CONCAT(ACT_FNAME,ACT_LNAME) AS ACTOR_NAME

FROM ACTOR WHERE ACT_ID IN (SELECT ACT_ID FROM MOVIE_CAST

GROUP BY ACT_ID HAVING COUNT(ACT_ID)>1);

ACTOR_NAME
KevinSpacey