

```
CREATE TABLE ACTOR (ACT_ID NUMBER (3),  
ACT_NAME VARCHAR (20),  
ACT_GENDER CHAR (1),  
CONSTRAINT PKAC PRIMARY KEY(ACT_ID));
```

```
CREATE TABLE DIRECTOR(  
DIR_ID NUMBER (3),  
DIR_NAME VARCHAR (20),  
DIR_PHONE NUMBER (10),  
CONSTRAINT PKDI PRIMARY KEY(DIR_ID));
```

```
CREATE TABLE MOVIES (  
MOV_ID NUMBER (4),  
MOV_TITLE VARCHAR (25),  
MOV_YEAR NUMBER (4),  
MOV_LANG VARCHAR (12),  
DIR_ID NUMBER (3),  
CONSTRAINT PKMV PRIMARY KEY(MOV_ID),  
CONSTRAINT FKMV FOREIGN KEY(DIR_ID) REFERENCES  
DIRECTOR(DIR_ID));
```

```
CREATE TABLE MOVIE_CAST (  
ACT_ID NUMBER (3),
```

```
MOV_ID NUMBER (4),  
ROLE VARCHAR (10),  
CONSTRAINT PKMC PRIMARY KEY(ACT_ID, MOV_ID),  
CONSTRAINT FKMC FOREIGN KEY(ACT_ID) REFERENCES  
ACTOR(ACT_ID),  
CONSTRAINT FKMCC FOREIGN KEY(MOV_ID) REFERENCES  
MOVIES(MOV_ID));
```

```
CREATE TABLE RATING (  
MOV_ID NUMBER (4),  
REV_STARS INTEGER,  
CONSTRAINT FKRA FOREIGN KEY(MOV_ID) REFERENCES  
MOVIES(MOV_ID));
```

### Queries

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

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

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

```

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

```

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

```

SELECT A.ACT_NAME
FROM ACTOR A
JOIN MOVIE_CAST C
ON A.ACT_ID=C.ACT_ID
JOIN MOVIES M
ON C.MOV_ID=M.MOV_ID
WHERE M.MOV_YEAR NOT BETWEEN 2000 AND 2015;

```

4. Find the title of movies and number of stars for each movie that has at least one rating and find the highest

FROM MOVIES  
number of stars that movie received. Sort the result by movie title.

```

SELECT MOV_TITLE, MAX(REV_STARS)
INNER JOIN RATING USING (MOV_ID)
GROUP BY MOV_TITLE
HAVING MAX (REV_STARS)>0
ORDER BY MOV_TITLE;

```

5. 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 SPIELBERG');

```

BEFORE UPDATING

```
SQL> SELECT * FROM RATING;
```

AFTER UPDATING

```
SQL> SELECT * FROM RATING;
```