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**CSE SEC 'A'**

## **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*)

### **CODE**

```
CREATE DATABASE MOVIEDB;
USE MOVIEDB;
CREATE TABLE ACTOR (
  ACT_ID INT,
  ACT_NAME VARCHAR (20),
  ACT_GENDER CHAR (1),
  PRIMARY KEY (ACT_ID));

CREATE TABLE DIRECTOR (
  DIR_ID INT,
  DIR_NAME VARCHAR (20),
  DIR_PHONE LONG,
  PRIMARY KEY (DIR_ID));

CREATE TABLE MOVIES (
  MOV_ID INT,
  MOV_TITLE VARCHAR (25),
  MOV_YEAR INT,
  MOV_LANG VARCHAR (12),
  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 VARCHAR(10),
  PRIMARY KEY (ACT_ID, MOV_ID),
  FOREIGN KEY(ACT_ID) REFERENCES ACTOR(ACT_ID) ON DELETE CASCADE,
  FOREIGN KEY(MOV_ID) REFERENCES MOVIES(MOV_ID) ON DELETE CASCADE);

CREATE TABLE RATING (
```

```
MOV_ID INT,
REV_STARS VARCHAR (25),
PRIMARY KEY (MOV_ID),
FOREIGN KEY (MOV_ID) REFERENCES MOVIES (MOV_ID));
```

```
INSERT INTO ACTOR VALUES ("301","ANUSHKA","F"),
                          ("302","PRABHAS","M"),
                          ("303","PUNITH","M"),
                          ("304","JERMY","M");
```

```
INSERT INTO DIRECTOR VALUES ("60","RAJAMOULI", "8751611001"),
                             ("61","HITCHCOCK", "7766138911"),
                             ("62","FARAN", "9986776531"),
                             ("63","STEVEN SPIELBERG", "8989776530");
```

```
INSERT INTO MOVIES VALUES ("1001","BAHUBALI-2", "2017","TELAGU", "60"),
                           ("1002","BAHUBALI-1", "2015", "TELAGU", "60"),
                           ("1003","AKASH", "2008", "KANNADA", "61"),
                           ("1004","WAR HORSE", "2011", "ENGLISH", "63");
```

```
INSERT INTO MOVIE_CAST VALUES ("301","1002", "HEROINE"),
                              ("301","1001", "HEROINE"),
                              ("303", "1003", "HERO"),
                              ("303", "1002", "GUEST"),
                              ("304", "1004", "HERO");
```

```
INSERT INTO RATING VALUES ("1001","4"),
                          ("1002", "2"),
                          ("1003","5"),
                          ("1004", "4");
```

SELECT \* FROM ACTOR;

	ACT_ID	ACT_NAME	ACT_GENDER
▶	301	ANUSHKA	F
	302	PRABHAS	M
	303	PUNITH	M
	304	JERMY	M
*	NULL	NULL	NULL

ACTOR 2 ×

SELECT \* FROM DIRECTOR;

	DIR_ID	DIR_NAME	DIR_PHONE
▶	60	RAJAMOULI	8751611001
	61	HITCHCOCK	7766138911
	62	FARAN	9986776531
	63	STEVEN SPIELBERG	8989776530
★	NULL	NULL	NULL

DIRECTOR 3 ×

SELECT \* FROM MOVIES;

	MOV_ID	MOV_TITLE	MOV_YEAR	MOV_LANG	DIR_ID
▶	1001	BAHUBALI-2	2017	TELAGU	60
	1002	BAHUBALI-1	2015	TELAGU	60
	1003	AKASH	2008	KANNADA	61
	1004	WAR HORSE	2011	ENGLISH	63
★	NULL	NULL	NULL	NULL	NULL

MOVIES 4 ×

SELECT \* FROM MOVIE\_CAST;

	ACT_ID	MOV_ID	ROLE
▶	301	1001	HEROINE
	301	1002	HEROINE
	303	1002	GUEST
	303	1003	HERO
	304	1004	HERO
▲	NULL	NULL	NULL

MOVIE\_CAST 2 ×

SELECT \* FROM RATING;

	MOV_ID	REV_STARS
▶	1001	4
	1002	2
	1003	5
	1004	4
★	NULL	NULL

RATING 6 ×

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

```
SELECT MOV_TITLE
FROM MOVIES
WHERE DIR_ID IN (SELECT DIR_ID
FROM DIRECTOR
WHERE DIR_NAME = 'HITCHCOCK');
```

	MOV_TITLE
▶	AKASH

**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;
```

	MOV_TITLE
▶	BAHUBALI-1

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

```
SELECT ACT_NAME, MOV_TITLE, MOV_YEAR
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;
```

	ACT_NAME	MOV_TITLE	MOV_YEAR
▶	ANUSHKA	BAHUBALI-2	2017

**4. 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 MOV_TITLE,MAX(REV_STARS)
FROM MOVIES M,RATING R
WHERE M.MOV_ID=R.MOV_ID
GROUP BY MOV_TITLE
HAVING COUNT(*)>=1
ORDER BY MOV_TITLE;
```

	MOV_TITLE	MAX(REV_STARS)
▶	AKASH	5
	BAHUBALI-1	2
	BAHUBALI-2	4
	WAR HORSE	4

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

```
UPDATE RATING
SET REV_STARS=5
WHERE MOV_ID IN(SELECT MOV_ID FROM MOVIES
WHERE DIR_ID IN(SELECT DIR_ID
FROM DIRECTOR
WHERE DIR_NAME = 'STEVEN SPIELBERG'));
```

```
SELECT * FROM RATING;
```

	MOV_ID	REV_STARS
▶	1001	4
	1002	2
	1003	5
	1004	5
*	NULL	NULL