

PRATICAL 02

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

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

```
CREATE TABLE MOVIES (  
  MOV_ID INT PRIMARY KEY,  
  MOV_TITLE VARCHAR (25),  
  MOV_YEAR INT,  
  MOV_LANG VARCHAR (12),  
  DIR_ID INT,  
  FOREIGN KEY (DIR_ID) REFERENCES DIRECTOR (DIR_ID));
```

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

```
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');  
INSERT INTO ACTOR VALUES (302, 'PRABHAS', 'M');  
INSERT INTO ACTOR VALUES (303, 'PUNITH', 'M');  
INSERT INTO ACTOR VALUES (304, 'JERMY', 'M');  
INSERT INTO DIRECTOR VALUES (60, 'RAJAMOULI', 87516110);
```

HARSHVARDHAN BHOSALE

```
INSERT INTO DIRECTOR VALUES (61, 'HITCHCOCK', 77661389);
INSERT INTO DIRECTOR VALUES (62, 'FARAN', 99867765);
INSERT INTO DIRECTOR VALUES (63, 'STEVEN SPIELBERG', 89897765);
```

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

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

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

```
SELECT * FROM actor;
```

		ACT_ID int	ACT_NAM varchar(20)	ACT_GENDE char(1)
1		301	ANUSHKA	F
2		302	PRABHAS	M
3		303	PUNITH	M
4		304	JERMY	M

```
SELECT * FROM director;
```

HARSHVARDHAN BHOSALE

		DIR_ID int	DIR_NAME varchar(20)	DIR_PHON int
	1	60	RAJAMOULI	87516110
	2	61	HITCHCOCK	77661389
	3	62	FARAN	99867765
	4	63	STEVEN SPIELBERG	89897765

SELECT * FROM MOVIES;

		MOV_ID int	MOV_TITLE varchar(25)	MOV_YEAR int	MOV_LAN varchar(12)	DIR_ID int
	1	1001	BAHUBALI-2	2017	TELAGU	60
	2	1002	BAHUBALI-1	2015	TELAGU	60
	3	1003	AKASH	2008	KANNADA	61
	4	1004	WAR HORSE	2011	ENGLISH	63

SELECT * FROM MOVIE_CAST;

		ACT_ID int	MOV_ID int	ROLE varchar(10)
	1	301	1001	HEROINE
	2	301	1002	HEROINE
	3	303	1002	GUEST
	4	303	1003	HERO
	5	304	1004	HERO

```
SELECT * FROM RATING;
```

		MOV_ID int	REV_STAR' varchar(25)
	1	1001	4
	2	1002	2
	3	1003	5
	4	1004	4

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

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

		MOV_TITL varchar
	1	AKASH

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

```
SELECT MOV_TITLE
FROM MOVIES M, MOVIE_CAST MC
WHERE M.MOV_ID=MC.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;
```

		TITLE char
	1	BAHUBALI-1

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

```
SELECT 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;
```

<input checked="" type="checkbox"/>	Q	ACT_NAME varchar
	1	ANUSHKA

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

<input checked="" type="checkbox"/>	Q	MOV_TITLE varchar	MAX(REV_STARS) varchar
	1	AKASH	5
	2	BAHUBALI-1	2
	3	BAHUBALI-2	4
	4	WAR HORSE	4

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'));
```

Q3)

```
CREATE TABLE students (
    stno INT PRIMARY KEY,
    name VARCHAR(50),
    addr VARCHAR(255),
    city VARCHAR(50),
    state VARCHAR(2),
    zip VARCHAR(10)
);
```

```
CREATE TABLE INSTRUCTORS (
    empno INT PRIMARY KEY,
    names VARCHAR(50),
    ranks VARCHAR(20),
    roomno VARCHAR(10),
    telno VARCHAR(15)
);
```

```
CREATE TABLE COURSES (
    cno INT PRIMARY KEY,
    cname VARCHAR(50),
    cr INT,
    cap INT
);
```

```
CREATE TABLE GRADES (
    stno INT,
    empno INT,
    cno INT,
    sem VARCHAR(10),
    year INT,
    grade INT,
    PRIMARY KEY (stno),
    FOREIGN KEY (stno) REFERENCES students(stno),
    FOREIGN KEY (empno) REFERENCES INSTRUCTORS(empno),
```

```
    FOREIGN KEY (cno) REFERENCES COURSES(cno)
);
```

```
CREATE TABLE ADVISING (
    stno INT,
    empno INT,
    PRIMARY KEY (stno, empno),
    FOREIGN KEY (stno) REFERENCES students(stno),
    FOREIGN KEY (empno) REFERENCES INSTRUCTORS(empno)
);
```

-- Insert records into the COURSES table

```
INSERT INTO COURSES (cno, cname, cr, cap)
VALUES
    (1, 'Math101', 3, 30),
    (2, 'CS210', 4, 25),
    (3, 'Physics101', 3, 20);
```

-- Insert records into the GRADES table

```
INSERT INTO GRADES (stno, empno, cno, sem, year, grade)
VALUES
    (1, 101, 1, 'Fall', 2021, 85),
    (2, 102, 2, 'Fall', 2021, 92),
    (3, 103, 3, 'Fall', 2021, 78);
```

-- Insert records into the ADVISING table

```
INSERT INTO ADVISING (stno, empno)
VALUES
    (1, 101),
    (2, 102),
    (3, 103);
```