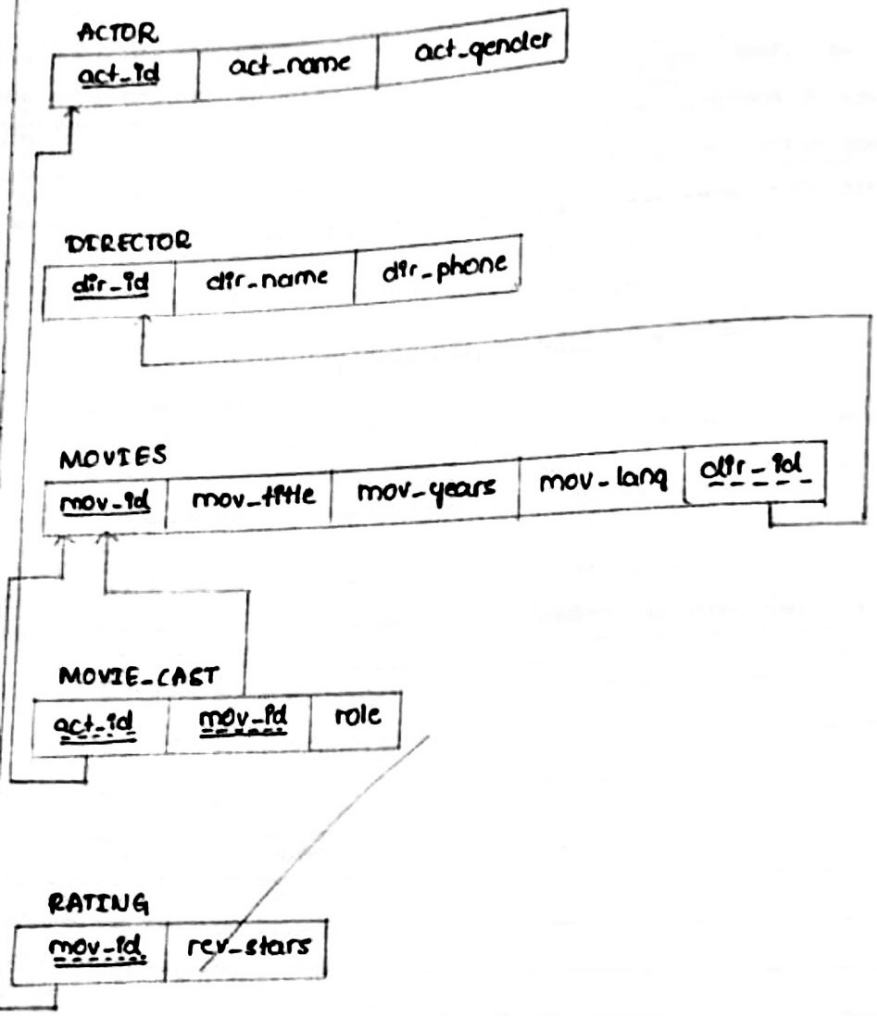
Schema Diagram:



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LAB PROGRAM - 03

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

1. List the title of all the movies directed by Hitchcock
2. Find the movie name where one or more actors acted in two or more movies
3. List all the actors who acted in a movie before 2000 and also in a movie after after 2015 (use join operation)
4. Find the title of movies and the number of stars for each movies that has atleast one rating and find the highest number of states that movie received sort the result by movie title.
5. Update the rating of all movies directed by steven spielberg to 5.

Table created

Table created

Table created

Table created

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Table Creation:

```
create table actor(
act_id int primary key,
act_name varchar(20),
act_gender char(2));

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(20),
mov_year int,
mov_long varchar(20),
dir_id int,
foreign key(dir_id) references director(dir_id) on delete cascade);

create table movie_cast(
act_id int,
mov_id int,
role varchar(20),
primary key(act_id, mov_id),
foreign key(act_id) reference actor(act_id) on delete cascade,
foreign key(mov_id) reference movies(mov_id) on delete cascade);
```

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Table created

select * from actor;

act_id	act_name	act_gender
301	Anushka	F
302	Prabhas	M
303	Punith	M
304	Jenny	F

select * from director;

dir_id	dir_name	dir_phone
60	Rajamouli	9876543210
61	Hitchcock	9844016165
62	Faran	9037792821
63	steven_spelberg	9535648875

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```
create table rating(
mov_id int primary key,
rev_stars int;
foreign key(mov_id) references movies(mov_id) on delete cascade);

Value insertion:

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', 'Jenny', 'F');

insert into director values
('60', 'Rajamouli', '9876543210');
insert into director values
('61', 'Hitchcock', '9844016165');
insert into director values
('62', 'Faran', '9037792821');
insert into director values
('63', 'Steven_spelberg', '9535648875');
```

select * from movies;

mov_id	mov_title	mov_year	mov_lang	dir_id
1001	Bahubali2	2017	Telugu	60
1002	Bahubali1	2015	Telugu	60
1003	Akash	2008	Kannada	61
1004	war-house	2011	English	63

select * from movie-cast;

act_id	mov_id	role
301	1002	Heroine
301	1001	Heroine
303	1002	Hero
303	1001	guest
304	1004	Hero

select * from rating;

mov_id	rev_stars
1001	4
1002	2
1003	5
1004	4

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```
3. insert into movies values
   ('1001', 'bahubali2', '2017', 'Telugu', '60');
   insert into movies values
   ('1002', 'bahubali1', '2015', 'Telugu', '60');
   insert into movies values
   ('1003', 'akash', '2008', 'kannada', '61');
   insert into movies values
   ('1004', 'war-house', '2011', 'English', '63');

4. insert into movie_cast values
   ('301', '1002', 'Heroine');
   insert into movie_cast values
   ('301', '1001', 'Heroine');
   insert into movie_cast values
   ('303', '1002', 'Hero');
   insert into movie_cast values
   ('303', '1001', 'guest');
   insert into movie_cast values
   ('304', '1004', 'Hero');

5. insert into rating values
   ('1001', '4');
   insert into rating values
   ('1002', '2');
   insert into rating values
   ('1003', '5');
   insert into rating values
   ('1004', '4');
```

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Output:

mov_title
akash

MOV_TITLE
Bahubali1
Bahubali2

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Queries:

1. List the title of all the movies directed by Hitchcock

```
select mov_title
from movies
where dir_id IN
    ( select dir_id
      from director
      where dir_name='Hitchcock');
```

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

```
select m.mov_title
from movie_cast mc, movies m
where mc.mov_id=m.mov_id and mc.act_ID IN
    ( select act_id
      from movie_cast
      group by act_id
      having count(act_id)>1 )
      group by m.mov_title
      having count(*)>1;
```

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ACT_NAME	MOV_TITLE	MOV_YEAR
anushka	bahubali2	2017
punith	bahubali2	2017

MOV_TITLE	REV_STARS
akash	5
bahubali1	2
bahubali2	4
warhouse	4

1row update select * from rating

MOV_ID	REV_STARS
1001	4
1002	2
1003	5
1004	5

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

```
select a.act_name, m.mov_title, m.mov_year
from actor a
JOIN movie_cast mv ON a.act_id = mv.act_id
JOIN movies m ON m.mov_id = mv.mov_id
where m.mov_year NOT between 2000 and 2015;
```

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

```
select m.mov_title, r.Rev_stars
from movies m, rating r
where m.mov_id = r.mov_id and rev_stars > 0
order by m.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 mov_id
                  from movies
                  where dir_id IN
                      (select dir_id
                       from director
                       where dir_name = 'stevenspielburg'));
```

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