**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)



create database Lab9;

use Lab9;

create table actor(act\_id int, act\_name varchar(30), act\_gender enum('M','F'), primary key(act\_id));

desc actor;



create table director(dir\_id int, dir\_name varchar(30), dir\_phone varchar(10), primary key(dir\_id));

desc director;



create table movies(mov\_id int, mov\_title varchar(30), mov\_year year, mov\_lang varchar(10), dir\_id int, primary key(mov\_id), foreign key(dir\_id) references director(dir\_id) on delete cascade);

desc movies;



create table moviecast(act\_id int, mov\_id int, part varchar(20), 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);

desc moviecast;



create table rating(mov\_id int, rev\_stars float, primary key(mov\_id, rev\_stars), foreign key(mov\_id) references movies(mov\_id) on delete cascade);

desc rating;



insert into actor values(100, "Leo DiCaprio", 'M');

insert into actor values(101, "Tom Hanks", 'M');

insert into actor values(102, "Tom Cruise", 'M');

insert into actor values(103, "Margot Robbie", 'F');

insert into actor values(104, "Jennifer Aniston", 'F');

insert into actor values(105, "Gal Gadot", 'F');

select \* from actor;



insert into director values(200, 'Steven Spielberg', '1649503470');

insert into director values(201, 'Alfred Hitchcock', '7989467865');

insert into director values(202, 'James Cameron', '5218281077');

insert into director values(203, 'Kathryn Bigelow', '6157228013');

insert into director values(204, 'Niki Caro', '8976600547');

insert into director values(205, 'Sofia Coppola', '3949875040');

select \* from director;



insert into movies values(300, 'Avatar', 2010, 'EN', 202);

insert into movies values(301, 'Dial M For Murder', 1990, 'EN', 201);

insert into movies values(302, 'Jurassic Park 1', 1999, 'EN', 200);

insert into movies values(303, 'Jurassic Park 2', 2017, 'EN', 200);

insert into movies values(304, 'Vertigo', 1986, 'EN', 201);

insert into movies values(305, 'Zero Dark Thirty', 2012, 'EN', 200);

select \* from movies;



insert into moviecast values(101, 300, 'actor');

insert into moviecast values(105, 300, 'actress');

insert into moviecast values(102, 301, 'actor');

insert into moviecast values(103, 301, 'actress');

insert into moviecast values(100, 302, 'actor');

insert into moviecast values(104, 302, 'actress');

insert into moviecast values(100, 303, 'actor');

insert into moviecast values(104, 303, 'actress');

insert into moviecast values(102, 304, 'actor');

insert into moviecast values(105, 304, 'actress');

insert into moviecast values(103, 305, 'actress');

select \* from moviecast;



insert into rating values(300, 4.5);

insert into rating values(301, 3);

insert into rating values(302, 4);

insert into rating values(303, 3.5);

insert into rating values(304, 5);

insert into rating values(305, 4);

select \* from rating;



**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='Alfred Hitchcock';



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

select m.mov\_title from movies m, moviecast mc where m.mov\_id=mc.mov\_id

and act\_id in( select act\_id from moviecast group by act\_id having count(act\_id) > 1) group by m.mov\_title having count(\*) >= 2;



**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, m.mov\_title, m.mov\_year from actor a, movies m, moviecast mc

where a.act\_id=mc.act\_id and mc.mov\_id=m.mov\_id and 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 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;



**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;

