SQL ASSESMENT

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1. Create Database project_movie_data and deploy table data according to ER diagram.

```
create database project movie data;
use project movie data;
create table Actor(act id int Not Null, act fname char(20), act lname char(20), act gender
char(1), Primary key(act id));
insert into Actor (act id, act fname, act lname, act gender) values
(101, 'James', 'Stewart', 'M'),
(102,'Deborah','Kerr','F'),
(103,'Peter','OToole','M'),
(104, 'Robert', 'De Niro', 'M'),
(105, 'F. Murray', 'Abraham', 'M'),
(106, 'Harrison', 'Ford', 'M'),
(107, 'Nicole ', 'Kidman ', 'F'),
(108, 'Stephen', 'Baldwin', 'M'),
            ', ' Nicholson', 'M'),
(109, 'Jack
(110, 'Mark', 'Wahlberg', 'M'),
(111, 'Woody ', 'Allen ', 'M'),
(112, 'Claire ', 'Danes ', 'F'),
            ', ' Robbins ', 'M'),
(113, 'Tim
(114, 'Kevin', 'Spacey', 'M'),
(115, 'Kate', 'Winslet', 'F'),
(116, 'Robin ', 'Williams ', 'M'),
(117, 'Jon
            ', ' Voight ', 'M'),
(118, 'Ewan', 'McGregor', 'M'),
(119, 'Christian', 'Bale', 'M'),
(120, 'Maggie', 'Gyllenhaa', 'F'),
(121, 'Dev', 'Patel', 'M'),
(122, 'Sigourney', 'Weaver', 'F'),
(123, 'David', 'Aston', 'M'),
(124, 'Ali ', 'Astin ', 'F');
create table Director(dir id int Not Null, dir fname char(20), dir lname char(20), Primary
Key(dir id));
insert into Director (dir_id, dir_fname, dir lname) values
(201, 'Alfred', 'Hitchcock'),
(202, 'Jack', 'Clayton'),
(203, 'David', 'Lean'),
(204, 'Michael', 'Cimino'),
(205, 'Milos ', 'Forman'),
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(206, 'Ridley', 'Scott'),
(207, 'Stanley', 'Kubrick'),
(208, 'Bryan', 'Singer'),
(209, 'Roman', 'Polanski'),
            ', ' Thomas An'),
(210, ' Paul
(211, 'Woody', 'Allen'),
(212, 'Hayao ', 'Miyazaki'),
(213, 'Frank', 'Darabont'),
(214, 'Sam
              ', ' Mendes'),
(215, 'James', 'Cameron'),
             ', ' Van Sant'),
(216, 'Gus
(217, ' John
            ', ' Boorman'),
(218, 'Danny ', 'Boyle'),
(219, 'Christoph', 'Nolan'),
(220, 'Richard', 'Kelly'),
(221, 'Kevin', 'Spacey'),
(222, 'Andrei', 'Tarkovsky'),
(223, 'Peter', 'Jackson');
create table Genres(gen id int Not Null,gen title char(20) Not Null,Primary Key(gen id));
insert into Genres(gen id, gen title) values
(1001, 'Action'),
(1002, 'Adventure'),
(1003, 'Animation'),
(1004, 'Biography'),
(1005, 'Comedy'),
(1006, 'Crime'),
(1007, 'Drama'),
(1008, 'Horror'),
(1009, 'Music'),
(1010, 'Mystery'),
(1011, 'Romance'),
(1012, 'Thriller'),
(1013, 'War');
create table Reviewer(rev id int Not Null,rev name char(30),primary key(rev id));
insert into Reviewer (rev id,rev name) values
(9001,'Righty Sock'),
(9002, 'Jack Malvern'),
(9003, 'Flagrant Baronessa'),
(9004, 'Alec Shaw'),
(9005,"),
(9006, 'Victor Woeltjen'),
(9007, 'Simon Wright'),
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(9008, 'Neal Wruck'),
(9009, 'Paul Monks'),
(9010, 'Mike Salvati'),
(9011,"),
(9012, 'Wessley S.Walker'),
(9013, 'Sasha Goldshtein'),
(9014, 'Josh Cates'),
(9015, 'Krug Stillo'),
(9016, 'Scott LeBrun'),
(9017, 'Hannah Steele'),
(9018, 'Vincent Cadena'),
(9019, 'Brand Sponseller'),
(9020, 'Richard Adams');
create table Movie(mov id int Not Null, mov title char(50), mov year int, mov time
int, mov lang char(50) Not Null, mov dt rel date, mov rel country char(50), Primary
Key(mov id));
insert into Movie (mov id, mov title, mov year, mov time, mov lang, mov dt rel,
mov rel country) values
(901, 'Vertigo
                     ', 1958, 128, 'English', '1958-08-24', 'UK'),
(902, 'The Innocents
                        ', 1961, 100, 'English', '1962-02-19', 'SW'),
(903, 'Lawrence of Arabia', 1962, 216, 'English', '1962-12-11', 'UK'),
(904, 'The Deer Hunter', 1978, 183, 'English', '1979-03-08', 'UK'),
(905, 'Amadeus
                       ', 1984, 160, 'English', '1985-01-07', 'UK'),
(906, 'Blade Runner
                        ', 1982, 117, 'English', '1982-09-09', 'UK'),
(907, 'Eyes Wide Shut', 1999, 159, 'English', '0000-00-00', 'UK'),
(908, 'The Usual Suspects', 1995, 106, 'English', '1995-08-25', 'UK'),
                       ', 1974, 130, 'English', '1974-08-09', 'UK'),
(909, 'Chinatown
(910, 'Boogie Nights
                        ', 1997, 155, 'English', '1998-02-16', 'UK'),
(911, 'Annie Hall
                       ', 1977, 93, 'English', '1977-04-20', 'USA'),
(912, 'Princess Mononoke', 1997, 134, 'Japanese', '2001-10-19', 'UK'),
(913, 'The Shawshank Redem', 1994, 142, 'English', '1995-02-17', 'UK'),
(914, 'American Beauty', 1999, 122, 'English', '0000-00-00', 'UK'),
(915, 'Titanic
                     ', 1997, 194, 'English', '1998-01-23', 'UK'),
(916, 'Good Will Hunting', 1997, 126, 'English', '1998-06-03', 'UK'),
(917, 'Deliverance
                       ', 1972, 109, 'English', '1982-10-05', 'UK'),
                       ', 1996, 94, 'English', '1996-02-23', 'UK'),
(918, 'Trainspotting
(919, 'The Prestige
                       ', 2006, 130, 'English', '2006-11-10', 'UK'),
(920, ' Donnie Darko
                         ', 2001, 113, 'English', '0000-00-00', 'UK'),
(921, 'Slumdog Millionaire', 2008, 120, 'English', '2009-01-09', 'UK'),
(922, 'Aliens
                     ', 1986, 137, 'English', '1986-08-29', 'UK'),
(923, 'Beyond the Sea
                        ', 2004, 118, 'English', '2004-11-26', 'UK'),
                     ', 2009, 162, 'English', '2009-12-17', 'UK'),
(924, 'Avatar
(925, 'Braveheart
                       ', 1995, 178, 'English', '1995-09-08', 'UK'),
(926, 'Seven Samurai
                         ', 1954, 207, 'Japanese ', '1954-04-26', 'JP'),
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(927, 'Spirited Away', 2001, 125, 'Japanese', '2003-09-12', 'UK'),
(928, 'Back to the Future', 1985, 116, 'English', '1985-12-04', 'UK');
create table Movie cast(act id int Not Null, mov id int Not Null, role char(30), foreign
key(act id) references actor(act id), foreign key(mov id) references movie(mov id));
insert into Movie cast (act id, mov id, role) values
(101,901,'John Scottie Ferguson'),
(102, 902, 'Miss Giddens'),
(103, 903, 'T.E. Lawrence'),
(104, 904, 'Michael'),
(105, 905, 'Antonio Salieri'),
(106, 906, 'Rick Deckard'),
(107, 907, 'Alice Harford'),
(108, 908, 'McManus'),
(110, 910, 'Eddie Adams'),
(111, 911, 'Alvy Singer'),
(112, 912, 'San'),
(113, 913, 'Andy Dufresne'),
(114, 914, 'Lester Burnham'),
(115, 915, 'Rose DeWitt Bukater'),
(116, 916, 'Sean Maguire'),
(117, 917, 'Ed'),
(118, 918, 'Renton'),
(120, 920, 'Elizabeth Darko'),
(121, 921, 'Older Jamal'),
(122, 922, 'Ripley'),
(114, 923, 'Bobby Darin'),
(109, 909, 'J.J. Gittes'),
(119, 919, 'Alfred Borden');
create table Movie direction(dir id int Not Null,mov id int Not Null,foreign key(dir id)
references director(dir id), foreign key(mov id) references movie(mov id));
insert into Movie direction (dir id, mov id) values
(201, 901),
(202, 902),
(203, 903),
(204, 904),
(205, 905),
(206, 906),
(207, 907),
```

(208, 908),

```
(209, 909),
(210, 910),
(211, 911),
(212, 912),
(213, 913),
(214, 914),
(215, 915),
(216, 916),
(217, 917),
(218, 918),
(219, 919),
(220, 920),
(218, 921),
(215, 922),
(221, 923);
create table Rating(mov id int Not Null, rev id int Not Null, rev stars int, num o ratings
int, foreign key(mov id) references movie(mov id), foreign key(rev id) references
reviewer(rev id));
insert into rating (mov id, rev id, rev stars, num o ratings) values
(901, 9001, '8', 263575),
(902, 9002, '8', 20207),
(903, 9003, '8', 202778),
(906, 9005, '8', 484746),
(924, 9006, '7', 0),
(908, 9007, '9', 779489),
(909, 9008, '0', 227235),
(910, 9009, '3', 195961),
(911, 9010, '8', 203875),
(912, 9011, '8', 0),
(914, 9013, '8', 862618),
(916, 9014, '4', 642132),
(925, 9015, '8', 81328),
(918, 9016, '0', 580301),
(920, 9017, '8', 609451),
(921, 9018, '8', 667758),
(922, 9019, '8', 511613),
(923, 9020, '7', 13091);
```

create table Movie_genres(mov_id int Not Null,gen_id int Not Null,foreign key(mov_id)references movie(mov_id), foreign key(gen_id) references genres(gen_id)); insert into Movie_genres (mov_id, gen_id) values (922, 1001),

```
(917, 1002),
(903, 1002),
(912, 1003),
(911, 1005),
(908, 1006),
(913, 1006),
(926, 1007),
(928, 1007),
(918, 1007),
(921, 1007),
(902, 1008),
(923, 1009),
(907, 1010),
(927, 1010),
(901, 1010),
(914, 1010),
(906, 1012),
(904, 1013);
```

2. Create 9 tables which are presented in ER model and load the data with their foreign key and primary key values.

```
create table Actor(act_id int Not Null,act_fname char(20),act_lname char(20),act_gender char(1),Primary key(act_id)); insert into Actor (act_id, act_fname, act_lname, act_gender) values (101,'James','Stewart','M'), (102,'Deborah','Kerr','F'), (103,'Peter','OToole','M'), (104, 'Robert ', 'De Niro ', 'M'), (105, 'F. Murray', 'Abraham ', 'M'), (106, 'Harrison ', 'Ford ', 'M'), (107, 'Nicole ', 'Kidman ', 'F'), (108, 'Stephen ', 'Baldwin ', 'M'),
```

```
(109, ' Jack
              ', ' Nicholson', 'M'),
(110, 'Mark
             ', ' Wahlberg ', 'M'),
(111, 'Woody', 'Allen', 'M'),
(112, 'Claire ', 'Danes ', 'F'),
(113, 'Tim
              ', 'Robbins ', 'M'),
(114, 'Kevin ', 'Spacey ', 'M'),
              ', 'Winslet', 'F'),
(115, 'Kate
(116, 'Robin', 'Williams', 'M'),
(117, 'Jon
            ', ' Voight ', 'M'),
(118, 'Ewan', 'McGregor', 'M'),
(119, 'Christian', 'Bale
                        ', 'M'),
(120, 'Maggie', 'Gyllenhaa', 'F'),
(121, 'Dev
              ', ' Patel ', 'M'),
(122, 'Sigourney', 'Weaver', 'F'),
(123, 'David', 'Aston', 'M'),
             ', 'Astin ', 'F');
(124, 'Ali
create table Director(dir id int Not Null, dir fname char(20), dir lname
char(20), Primary Key(dir id));
insert into Director (dir id, dir fname, dir lname) values
(201, 'Alfred', 'Hitchcock'),
(202, 'Jack
            ', ' Clayton'),
(203, 'David', 'Lean'),
(204, 'Michael', 'Cimino'),
(205, 'Milos ', 'Forman'),
(206, 'Ridley', 'Scott'),
(207, 'Stanley', 'Kubrick'),
(208, 'Bryan', 'Singer'),
(209, 'Roman ', 'Polanski'),
(210, ' Paul
              ', 'Thomas An'),
(211, 'Woody', 'Allen'),
(212, 'Hayao ', 'Miyazaki'),
(213, 'Frank', 'Darabont'),
              ', ' Mendes'),
(214, 'Sam
(215, 'James ', 'Cameron'),
(216, 'Gus
              ', ' Van Sant'),
              ', ' Boorman'),
(217, 'John
(218, 'Danny ', 'Boyle'),
```

```
(219, 'Christoph', 'Nolan'),
(220, 'Richard', 'Kelly'),
(221, 'Kevin', 'Spacey'),
(222, 'Andrei ', 'Tarkovsky'),
(223, 'Peter', 'Jackson');
create table Genres(gen id int Not Null,gen title char(20) Not Null,Primary
Key(gen id));
insert into Genres(gen id, gen title) values
(1001, 'Action'),
(1002, 'Adventure'),
(1003, 'Animation'),
(1004, 'Biography'),
(1005, 'Comedy'),
(1006, 'Crime'),
(1007, 'Drama'),
(1008, 'Horror'),
(1009, 'Music'),
(1010, 'Mystery'),
(1011, 'Romance'),
(1012, 'Thriller'),
(1013, 'War');
create table Reviewer(rev id int Not Null,rev name char(30),primary
key(rev id));
insert into Reviewer (rev id,rev name) values
(9001,'Righty Sock'),
(9002, 'Jack Malvern'),
(9003, 'Flagrant Baronessa'),
(9004, 'Alec Shaw'),
(9005,"),
(9006, 'Victor Woeltjen'),
(9007, 'Simon Wright'),
(9008, 'Neal Wruck'),
(9009, 'Paul Monks'),
(9010, 'Mike Salvati'),
(9011,"),
```

```
(9012, 'Wessley S.Walker'),
(9013, 'Sasha Goldshtein'),
(9014, 'Josh Cates'),
(9015, 'Krug Stillo'),
(9016, 'Scott LeBrun'),
(9017, 'Hannah Steele'),
(9018, 'Vincent Cadena'),
(9019, 'Brand Sponseller'),
(9020, 'Richard Adams');
```

```
create table Movie(mov id int Not Null, mov title char(50), mov year
int,mov time int,mov lang char(50) Not Null,mov dt rel
date,mov rel country char(50), Primary Key(mov id));
insert into Movie (mov id, mov title, mov year, mov time, mov lang,
mov dt rel, mov rel country) values
                    ', 1958, 128, 'English', '1958-08-24', 'UK'),
(901, 'Vertigo
(902, 'The Innocents
                      ', 1961, 100, 'English', '1962-02-19', 'SW'),
(903, 'Lawrence of Arabia', 1962, 216, 'English', '1962-12-11', 'UK'),
(904, 'The Deer Hunter', 1978, 183, 'English', '1979-03-08', 'UK'),
                      ', 1984, 160, 'English', '1985-01-07', 'UK'),
(905, 'Amadeus
                      ', 1982, 117, 'English', '1982-09-09', 'UK'),
(906, 'Blade Runner
(907, 'Eyes Wide Shut', 1999, 159, 'English', '0000-00-00', 'UK'),
(908, 'The Usual Suspects', 1995, 106, 'English', '1995-08-25', 'UK'),
                       ', 1974, 130, 'English', '1974-08-09', 'UK'),
(909, 'Chinatown
(910, 'Boogie Nights
                        ', 1997, 155, 'English', '1998-02-16', 'UK'),
(911, 'Annie Hall
                      ', 1977, 93, 'English', '1977-04-20', 'USA'),
(912, 'Princess Mononoke', 1997, 134, 'Japanese', '2001-10-19', 'UK'),
(913, 'The Shawshank Redem', 1994, 142, 'English', '1995-02-17', 'UK'),
(914, 'American Beauty', 1999, 122, 'English', '0000-00-00', 'UK'),
(915, 'Titanic
                    ', 1997, 194, 'English', '1998-01-23', 'UK'),
(916, 'Good Will Hunting', 1997, 126, 'English', '1998-06-03', 'UK'),
                      ', 1972, 109, 'English', '1982-10-05', 'UK'),
(917, 'Deliverance
(918, 'Trainspotting
                       ', 1996, 94, 'English', '1996-02-23', 'UK'),
(919, 'The Prestige
                       ', 2006, 130, 'English', '2006-11-10', 'UK'),
(920, 'Donnie Darko
                        ', 2001, 113, 'English', '0000-00-00', 'UK'),
(921, 'Slumdog Millionaire', 2008, 120, 'English', '2009-01-09', 'UK'),
(922, 'Aliens
                    ', 1986, 137, 'English', '1986-08-29', 'UK'),
(923, 'Beyond the Sea', 2004, 118, 'English', '2004-11-26', 'UK'),
```

```
(924, 'Avatar ', 2009, 162, 'English ', '2009-12-17', 'UK'),

(925, 'Braveheart ', 1995, 178, 'English ', '1995-09-08', 'UK'),

(926, 'Seven Samurai ', 1954, 207, 'Japanese ', '1954-04-26', 'JP'),

(927, 'Spirited Away ', 2001, 125, 'Japanese ', '2003-09-12', 'UK'),

(928, 'Back to the Future ', 1985, 116, 'English ', '1985-12-04', 'UK');
```

```
create table Movie cast(act id int Not Null, mov id int Not Null, role
char(30), foreign key(act id) references actor(act id), foreign
key(mov id)references movie(mov id));
insert into Movie cast (act id, mov id, role) values
(101,901,'John Scottie Ferguson'),
(102, 902, 'Miss Giddens'),
(103, 903, 'T.E. Lawrence'),
(104, 904, 'Michael'),
(105, 905, 'Antonio Salieri'),
(106, 906, 'Rick Deckard'),
(107, 907, 'Alice Harford'),
(108, 908, 'McManus'),
(110, 910, 'Eddie Adams'),
(111, 911, 'Alvy Singer'),
(112, 912, 'San'),
(113, 913, 'Andy Dufresne'),
(114, 914, 'Lester Burnham'),
(115, 915, 'Rose DeWitt Bukater'),
(116, 916, 'Sean Maguire'),
(117, 917, 'Ed'),
(118, 918, 'Renton'),
(120, 920, 'Elizabeth Darko'),
(121, 921, 'Older Jamal'),
(122, 922, 'Ripley'),
(114, 923, 'Bobby Darin'),
(109, 909, 'J.J. Gittes'),
(119, 919, 'Alfred Borden');
```

```
create table Movie direction(dir id int Not Null,mov id int Not Null,foreign
key(dir id) references director(dir id), foreign key(mov id) references
movie(mov id));
insert into Movie direction (dir id, mov id) values
(201, 901),
(202, 902),
(203, 903),
(204, 904),
(205, 905),
(206, 906),
(207, 907),
(208, 908),
(209, 909),
(210, 910),
(211, 911),
(212, 912),
(213, 913),
(214, 914),
(215, 915),
(216, 916),
(217, 917),
(218, 918),
(219, 919),
(220, 920),
(218, 921),
(215, 922),
(221, 923);
create table Rating(mov id int Not Null, rev id int Not Null, rev stars
int, num o ratings int, foreign key(mov id) references movie(mov id), foreign
key(rev id) references reviewer(rev id));
```

```
int,num_o_ratings int,foreign key(mov_id) references movie(mov_id),foreign key(rev_id) references reviewer(rev_id)); insert into rating (mov_id, rev_id, rev_stars, num_o_ratings) values (901, 9001, '8', 263575), (902, 9002, '8', 20207), (903, 9003, '8', 202778), (906, 9005, '8', 484746), (924, 9006, '7', 0), (908, 9007, '9', 779489),
```

```
(909, 9008, '0', 227235),

(910, 9009, '3', 195961),

(911, 9010, '8', 203875),

(912, 9011, '8', 0),

(914, 9013, '8', 862618),

(916, 9014, '4', 642132),

(925, 9015, '8', 81328),

(918, 9016, '0', 580301),

(920, 9017, '8', 609451),

(921, 9018, '8', 667758),

(922, 9019, '8', 511613),

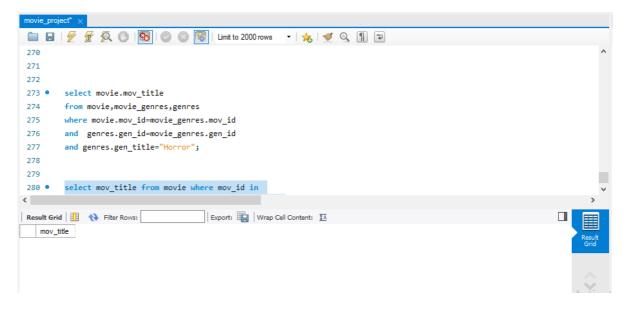
(923, 9020, '7', 13091);
```

create table Movie genres(mov id int Not Null, gen id int Not Null, foreign key(mov id)references movie(mov id), foreign key(gen id) references genres(gen id)); insert into Movie genres (mov id, gen id) values (922, 1001),(917, 1002),(903, 1002),(912, 1003),(911, 1005),(908, 1006),(913, 1006), (926, 1007),(928, 1007),(918, 1007),(921, 1007),(902, 1008),(923, 1009),(907, 1010),(927, 1010),(901, 1010),(914, 1010),(906, 1012),(904, 1013);

```
create table Actor(act_id int Not Null,act_fname char(20),act_lname char(20),act_gender char(1),Primary key(act_id));
insert into Actor (act_id, act_fname, act_lname, act_gender) values
(101, 'James', 'Stewart', 'M'),
(102, 'Deborah', 'Kerr', 'F'),
(103, 'Peter', 'OToole', 'M'),
(104, ' Robert ', ' De Niro ', 'M'),
(105, ' F. Murray', ' Abraham ', 'M'),
```

3. Write a query in SQL to list the Horror movies?

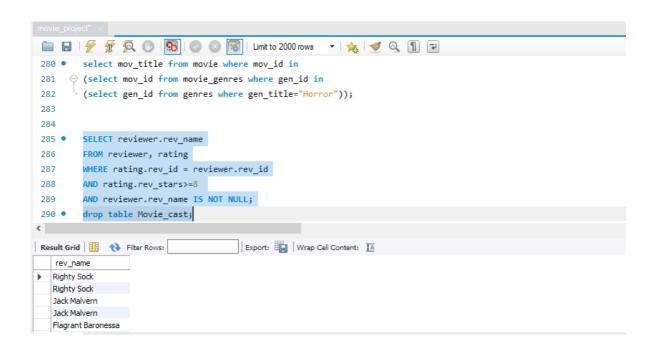
select mov_title from movie where mov_id in (select mov_id from movie_genres where gen_id in(select gen_id from genres where gen_title="Horror"));



4. Write a query in SQL to find the name of all reviewers who have rated 8 or more stars?

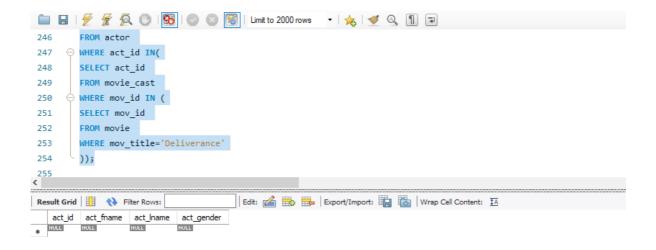
```
SELECT reviewer.rev_name
FROM reviewer, rating
WHERE rating.rev_id = reviewer.rev_id
AND rating.rev_stars>=8
```

AND reviewer.rev_name IS NOT NULL; drop table Movie cast;



5. Write a query in SQL to list all the information of the actors who played a role in the movie 'Deliverance'

```
SELECT *
FROM actor
WHERE act_id IN(
SELECT act_id
FROM movie_cast
WHERE mov_id IN (
SELECT mov_id
FROM movie
WHERE mov_title='Deliverance'
));
```



6. Write a query in SQL to find the name of the director (first and last names) who directed a movie that casted a role for 'Eyes Wide Shut'. (using subquery)

```
SELECT dir_fname, dir_lname
FROM director
WHERE dir_id in (
SELECT dir_id
FROM movie_direction
WHERE mov_id in(
SELECT mov_id
FROM movie_cast WHERE role = ANY (
SELECT role
FROM movie_cast
WHERE mov_id IN (
SELECT mov_id
FROM movie
WHERE mov title='Eyes Wide Shut'))));
```

```
□ □ □ | F F Q □ | B | □ □ □ | Limit to 2000 rows
       FROM movie_cast WHERE role = ANY (
       SELECT role
264
265
       FROM movie cast
       WHERE mov_id IN (
266
       SELECT mov id
267
268
       FROM movie
       WHERE mov_title='Eyes Wide Shut'))));
269
270
271
                                  Export: Wrap Cell Content: IA
dir_fname dir_lname
```

7. Write a query in SQL to find the movie title, year, date of release, director and actor for those movies which reviewer is 'Neal Wruck'

SELECT mov_title, mov_year, mov_dt_rel, dir_fname, dir_lname, act_fname, act_lname FROM movie a, movie_direction b, director c, rating d, reviewer e, actor f, movie_cast g WHERE a.mov_id=b.mov_id AND b.dir_id=c.dir_id AND a.mov_id=d.mov_id AND d.rev_id=e.rev_id AND a.mov_id=g.mov_id AND g.act_id=f.act_id AND e.rev_name ="Neal Wruck";

