SBA 3 -MySQL

Adithya K Prabhu - 211480

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

Sol: create database project_movie_data;

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

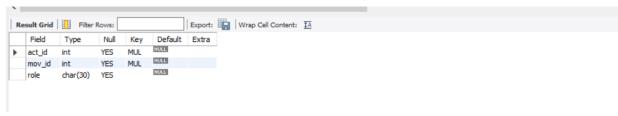
Soln:

CREATING THE TABLES

create table actor(act_id int primary key,act_fname char(20),act_lname char(20),act_gender char(1)); desc actor;



create table movie_cast(act_id int,mov_id int, role
char(30), foreign key (act_id) references
actor(act_id),foreign key (mov_id) references
movie(mov_id));
desc movie cast;

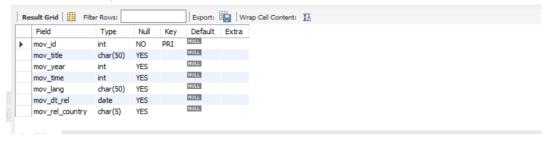


create table director(dir_id int primary key,dir_fname char(20),dir_lname char(20));

desc director;

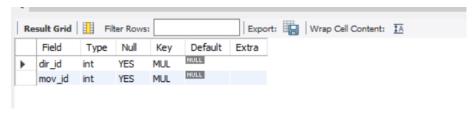


create table movie(mov_id int primary key,mov_title
char(50),mov_year int,mov_time int,mov_lang
char(50),mov_dt_rel date,mov_rel_country char(5));
desc movie;



create table movie_direction(dir_id int,mov_id int,foreign
key (dir_id) references director(dir_id), foreign
key(mov_id) references movie(mov_id));

desc movie_direction;



create table reviewer(rev_id int primary key, rev_name
char(20));

desc reviewer;



create table genres(gen_id int primary key,gen_title
char(20));

desc genres;



create table mov_genres(mov_id int,gen_id int, foreign key
(mov_id) references movie(mov_id),foreign key (gen_id)
references genres(gen_id));

desc mov genres;



create table rating(mov_id int,rev_id int, rev_stars
decimal(8,2), num_o_ratings int,foreign key (mov_id)
references movie(mov_id), foreign key (rev_id) references
reviewer(rev_id));

desc rating;

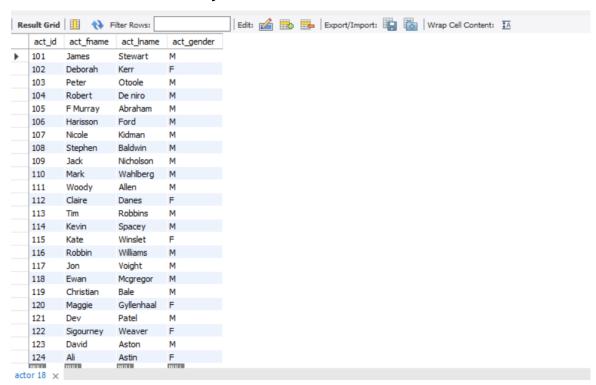


INSERTING VALUES TO THE TABLES:

Actor

```
insert into actor values(101, 'James', 'Stewart', 'M');
insert into actor values(102, 'Deborah', 'Kerr', 'F');
insert into actor values(103, 'Peter', 'Otoole', 'M');
insert into actor values(104, 'Robert', 'De niro', 'M');
insert into actor values(105,'F Murray','Abraham','M');
insert into actor values(106, 'Harisson', 'Ford', 'M');
insert into actor values(107, 'Nicole', 'Kidman', 'M');
insert into actor values(108, 'Stephen', 'Baldwin', 'M');
insert into actor values(109, 'Jack', 'Nicholson', 'M');
insert into actor values(110, 'Mark', 'Wahlberg', 'M');
insert into actor values(111, 'Woody', 'Allen', 'M');
insert into actor values(112, 'Claire', 'Danes', 'F');
insert into actor values(113, 'Tim', 'Robbins', 'M');
insert into actor values(114, 'Kevin', 'Spacey', 'M');
insert into actor values(115, 'Kate', 'Winslet', 'F');
insert into actor values(116, 'Robbin', 'Williams', 'M');
insert into actor values(117, 'Jon', 'Voight', 'M');
insert into actor values(118, 'Ewan', 'Mcgregor', 'M');
insert into actor values(119, 'Christian', 'Bale', 'M');
insert into actor values(120, 'Maggie', 'Gyllenhaal', 'F');
insert into actor values(121, 'Dev', 'Patel', 'M');
insert into actor values(122, 'Sigourney', 'Weaver', 'F');
insert into actor values(123, 'David', 'Aston', 'M');
insert into actor values(124, 'Ali', 'Astin', 'F');
```

select * from actor;



Director

```
insert into director values(201, 'Alfred', 'Hitchcock');
insert into director values(202, 'Jack', 'Clayton');
insert into director values(203, 'David', 'Lean');
insert into director values(204, 'Michael', 'Cimino');
insert into director values(205, 'Milos', 'Forman');
insert into director values(206, 'Ridley', 'Scott');
insert into director values(207, 'Stanley', 'Kubrik');
insert into director values(208, 'Bryan', 'Singer');
insert into director values(209, 'Roman', 'Polanski');
insert into director values(210, 'Paul', 'Thomas Anderson');
insert into director values(211, 'Woody', 'Allen');
insert into director values(212, 'Hayao', 'Mikazaki');
```

```
insert into director values(213,'Frank','Darabont');
insert into director values(214,'Sam','Mendes');
insert into director values(215,'James','Cameron');
insert into director values(216,'Gus','Van sant');
insert into director values(217,'John','Boorman');
insert into director values(218,'Danny','Boyle');
insert into director values(219,'Christopher','Nolan');
insert into director values(220,'Richard','Kelly');
insert into director values(221,'Kevin','Spacey');
insert into director values(222,'Andrei','Takovsky');
insert into director values(223,'Peter','Jackson');
select * from director;
```

	dir_id	dir_fname	dir_Iname	
١	201	Alfred	Hitchcock	
	202	Jack	Clayton	
	203	David	Lean	
	204	Michael	Cimino	
	205	Milos	Forman	
	206	Ridley	Scott	
	207	Stanley	Kubrik	
	208	Bryan	Singer	
	209	Roman	Polanski	
	210	Paul	Thomas Anderson	
	211	Woody	Allen	
	212	Hayao	Mikazaki	
	213	Frank	Darabont	
	214	Sam	Mendes	
	215	James	Cameron	
	216	Gus	Van sant	
	217	John	Boorman	
	218	Danny	Boyle	
	219	Christopher	Nolan	
	220	Richard	Kelly	
	221	Kevin	Spacey	
	222	Andrei	Takovsky	
	223	Peter	Jackson	
	NULL	NULL	NULL	

Movie

```
insert into movie
values(901,'Vertigo',1958,128,'English','19580824','UK');
insert into movie values(902,'The
innocents',1961,100,'English','19620219','Sw');
```

```
insert into movie values(903, 'Lawrence of
arabia',1962,216,'English','19621211','UK');
insert into movie values (904, 'The deer
hunter',1978,183,'English','19790308','UK');
insert into movie
values(905, 'Amadeus', 1984, 160, 'English', '19850107', 'UK');
insert into movie values(906, 'Blade
runner',1982,117,'English','19820909','UK');
insert into movie values(907, 'Eyes wide
shut',1999,159,'English','','UK');
insert into movie values (908, 'The usual
Suspects',1995,106, 'English', '19950825', 'UK');
insert into movie
values(909, 'Chinatown',1974,130, 'English', '19740809', 'UK')
insert into movie values(910, 'Boogie
Nights',1997,155,'English','19980216','UK');
insert into movie values(911, 'Annie
Hall',1977,93, 'English', '19770420', 'USA');
insert into movie values(912, 'Princess
monokonke',1997,134,'Japanese','20011019','UK');
insert into movie values(913, 'The Shawshank
Redemption',1994,142, 'English', '19950217', 'UK');
insert into movie values(914, 'American
beauty',1999,122,'English',null,'UK');
insert into movie
values(915, 'Titanic', 1997, 194, 'English', '19980123', 'UK');
insert into movie values(916, 'Good Will
Hunting',1997,126, 'English', '19980603', 'UK');
insert into movie
values(917, 'Deliverance', 1972, 109, 'English', '19821005', 'UK
');
insert into movie
values(918, 'Trainspotting', 1996, 94, 'English', '19960223', 'U
K');
```

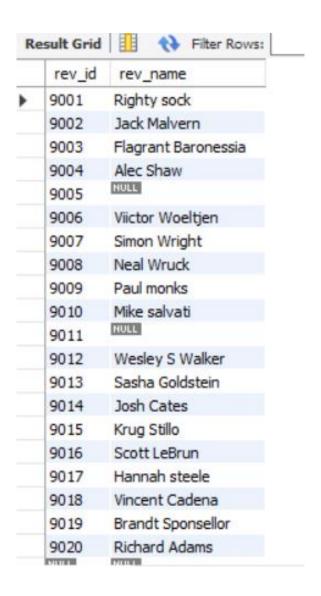
```
insert into movie values(919, 'The
Prestige',2006,130,'English','20061110','UK');
insert into movie values(920, 'Donnie
Darko',2001,113,'English',null,'UK');
insert into movie values(921, 'Slumdog
millionaire',2008,120,'English','20090109','UK');
insert into movie
values(922, 'Aliens', 1986, 137, 'English', '19860929', 'UK');
insert into movie values(923, 'Beyond The
Sea',2004,118, 'English', '20041126', 'UK');
insert into movie
values(924, 'Avatar', 2009, 162, 'English', null, 'UK');
insert into movie values(926, 'Seven
Samurai',1954,207,'Japanese','19540426','JP');
insert into movie values(927, 'Spirited
Away',2001,125,'Japanese','20030912','UK');
insert into movie values(928, 'BAck to the
future',1985,116,'English','19851204','UK');
insert into movie
values(925, 'BraveHeart', 1995, 178, 'English', '19950908', 'UK'
);
```

select * from movie;

mov_iu	mov_uue	mov_year	mov_ume	mov_lang	mov_ut_	iei iliov_rei_	couriu y
901	Vertigo	1958	128	English	1958-08-2	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	1979-03-0	08 UK	
905	Amadeus	1984	160	English	1985-01-0	07 UK	
906	Blade runner	1982	117	English	1982-09-0	09 UK	
907	Eyes wide shut	1999	159	English	NULL	UK	
908	The usual Suspects	1995	106	English	1995-08-2	25 UK	
909	Chinatown	1974	130	English	1974-08-0	09 UK	
910	Boogie Nights	1997	155	English	1998-02-	16 UK	
911	Annie Hall	1977	93	English	1977-04-2	20 USA	
912	Princess monokonke	1997	134	Japanese	2001-10-	19 UK	
913	The Shawshank R	1994	142	English	1995-02-	17 UK	
914	American beauty	1999	122	English	NULL	UK	
915	Titanic	1997	194	English	1998-01-2	23 UK	
916	Good Will Hunting	1997	126	English	1998-06-0	03 UK	
917	Deliverance	1972	109	English	1982-10-0	05 UK	
918	Trainspotting	1996	94	English	1996-02-2	23 UK	
919	The Prestige	2006	130	English	2006-11-	10 UK	
920	Donnie Darko	2001	113	English	NULL	UK	
921	Slumdog millionaire	2008	120	English	2009-01-0	09 UK	
922	Aliens	1986	137	English	1986-09-2	29 UK	
923	Beyond The Sea	2004	118	English	2004-11-2	26 UK	
924	Avatar	2009	162	English	NULL	UK	
925	BraveHeart	1995	178	English	1995-09-0	08 UK	
926	Seven Samurai	1954	207	Japanese	1954-04-2	26 JP	
927	Spirited Away	2001	125	Ja	panese	2003-09-12	UK
928	BAck to the future	1985	116	En	glish	1985-12-04	UK
NULL	NULL	NULL	NULL			NULL	NULL

Reviewer

```
insert into reviewer values(9001, 'Righty sock');
insert into reviewer values(9002, 'Jack Malvern');
insert into reviewer values(9003, 'Flagrant Baronessia');
insert into reviewer values(9004, 'Alec Shaw');
insert into reviewer values(9005, null);
insert into reviewer values(9006, 'Viictor Woeltjen');
insert into reviewer values(9007, 'Simon Wright');
insert into reviewer values(9008, 'Neal Wruck');
insert into reviewer values(9009, 'Paul monks');
insert into reviewer values(9010, 'Mike salvati');
insert into reviewer values(9011,null);
insert into reviewer values(9012, 'Wesley S Walker');
insert into reviewer values(9013, 'Sasha Goldstein');
insert into reviewer values(9014, 'Josh Cates');
insert into reviewer values(9015, 'Krug Stillo');
insert into reviewer values(9016, 'Scott LeBrun');
insert into reviewer values(9017, 'Hannah steele');
insert into reviewer values(9018, 'Vincent Cadena');
insert into reviewer values(9019, 'Brandt Sponsellor');
insert into reviewer values(9020, 'Richard Adams');
select * from reviewer;
```



Genres

```
insert into genres values(1001, 'Action');
insert into genres values(1002, 'Adventure');
insert into genres values(1003, 'Animation');
insert into genres values(1004, 'Biography');
insert into genres values(1005, 'Comedy');
insert into genres values(1006, 'Crime');
```

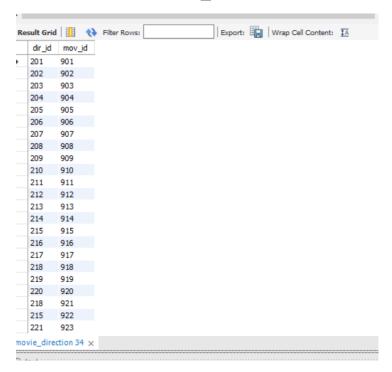
```
insert into genres values(1007,'Drama');
insert into genres values(1008,'Horror');
insert into genres values(1009,'Music');
insert into genres values (1010,'Mystery');
insert into genres values(1011,'Romance');
insert into genres values(1012,'Thriller');
insert into genres values(1013,'War');
select * from genres;
```



Movie_direction

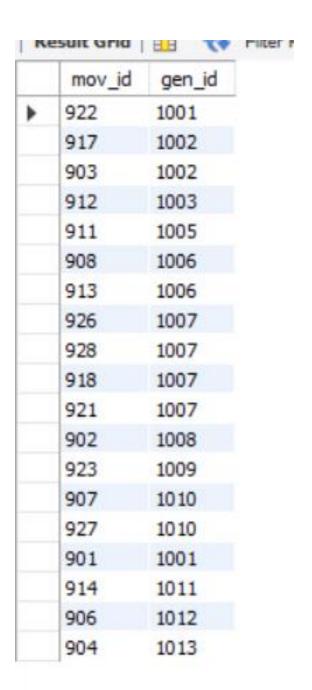
```
insert into movie_direction values(201,901);
insert into movie_direction values(202,902);
insert into movie_direction values(203,903);
insert into movie_direction values(204,904);
insert into movie_direction values(205,905);
insert into movie_direction values(206,906);
insert into movie_direction values(207,907);
```

```
insert into movie_direction values(208,908);
insert into movie direction values(209,909);
insert into movie direction values(210,910);
insert into movie direction values(211,911);
insert into movie direction values(212,912);
insert into movie_direction values(213,913);
insert into movie direction values(214,914);
insert into movie direction values(215,915);
insert into movie_direction values(216,916);
insert into movie direction values(217,917);
insert into movie direction values(218,918);
insert into movie_direction values(219,919);
insert into movie direction values(220,920);
insert into movie direction values(218,921);
insert into movie_direction values(215,922);
insert into movie direction values(221,923);
select *from movie direction;
```



Movie Genres

```
insert into mov_genres values(922,1001);
insert into mov_genres values(917,1002);
insert into mov genres values(903,1002);
insert into mov_genres values(912,1003);
insert into mov_genres values(911,1005);
insert into mov genres values(908,1006);
insert into mov_genres values(913,1006);
insert into mov_genres values(926,1007);
insert into mov genres values(928,1007);
insert into mov_genres values(918,1007);
insert into mov_genres values(921,1007);
insert into mov_genres values(902,1008);
insert into mov_genres values(923,1009);
insert into mov_genres values(907,1010);
insert into mov genres values(927,1010);
insert into mov_genres values(901,1001);
insert into mov_genres values(914,1011);
insert into mov_genres values(906,1012);
insert into mov_genres values(904,1013);
select * from mov genres;
```



Ratings

```
insert into rating values(901,9001,8.4,263575);
insert into rating values(902,9002,7.9,20207);
insert into rating values(903,9003,8.3,202778);
insert into rating values(906,9005,8.2,484746);
insert into rating values(924,9006,7.3,null);
```

```
insert into rating values(908,9007,8.6,779489); insert into rating values(909,9008,null,227235); insert into rating values(910,9009,3,195961); insert into rating values(911,9010,8.1,203875); insert into rating values(912,9011,8.4,null); insert into rating values(912,9011,8.4,null); insert into rating values(914,9013,7,862618); insert into rating values(915,9001,7.7,830095); insert into rating values(916,9014,4,642132); insert into rating values(925,9015,7.7,81328); insert into rating values(928,9016,null,580301); insert into rating values(920,9017,8.1,609451); insert into rating values(921,9018,8,667758); insert into rating values(922,9019,8.4,511613); insert into rating values(923,9020,6.7,13091); select * from rating;
```

Re	esult Grid	***	Filter Rows:	
	mov_id	rev_id	rev_stars	num_o_ratings
•	901	9001	8.40	263575
	902	9002	7.90	20207
	903	9003	8.30	202778
	906	9005	8.20	484746
	924	9006	7.30	NULL
	908	9007	8.60	779489
	909	9008	NULL	227235
	910	9009	3.00	195961
	911	9010	8.10	203875
	912	9011	8.40	NULL
	914	9013	7.00	862618
	915	9001	7.70	830095
	916	9014	4.00	642132
	925	9015	7.70	81328
	918	9016	NULL	580301
	920	9017	8.10	609451
	921	9018	8.00	667758
	922	9019	8.40	511613
	923	9020	6.70	13091

Movie_cast

```
insert into movie cast values(101,901, 'John Scottie
Ferguson');
insert into movie cast values(102,902, 'MissGiddens');
insert into movie cast values(103,903,'T E lawrence');
insert into movie_cast values(104,904,'Michael');
insert into movie cast values(105,905, 'Antonio Salieri');
insert into movie_cast values(106,906,'Rick deckard');
insert into movie cast values(107,907,'Alice harford');
insert into movie cast values(108,908, 'Mcmanus');
insert into movie cast values(110,910,'Eddie adams');
insert into movie cast values(111,911,'Alvy singer');
insert into movie cast values(112,912,'San');
insert into movie cast values(113,913,'Andy Dufresne');
insert into movie cast values(114,914,'Lester burham');
insert into movie cast values(115,915, 'Rose dewitt
bukater');
insert into movie_cast values(116,916,'Sean Maguire');
insert into movie_cast values(117,917,'Ed');
insert into movie cast values(118,918, 'Renton');
insert into movie cast values(120,920,'Elizebath Darko');
insert into movie_cast values(121,921,'Older jamal');
insert into movie cast values(122,922, 'Ripley');
insert into movie_cast values(114,923,'Bobby Darin');
insert into movie_cast values(109,909,'J J Gittes');
insert into movie cast values(119,919,'Alfred Borden');
```

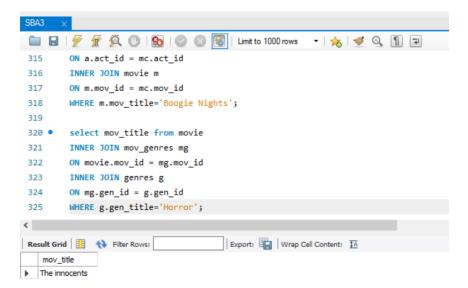
select * from movie_cast;



3. Write a query in sql to list the horror movies.

Sol:

```
select mov_title from movie
INNER JOIN mov_genres mg
ON movie.mov_id = mg.mov_id
INNER JOIN genres g
ON mg.gen_id = g.gen_id
WHERE g.gen_title = 'Horror';
```



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

Sol:

```
select rev_name from reviewer r
INNER JOIN rating ra
ON r.rev_id = ra.rev_id
where ra.rev_stars >= 8.00;
```

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

Sol:

```
SELECT
a.act_id,a.act_fname,a.act_lname,a.act_gender,mo.mov_
title from actor a
INNER JOIN movie_cast m
ON a.act_id = m.act_id
INNER JOIN movie mo
```

```
ON mo.mov_id = m.mov_id
Where mo.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)

Sol:

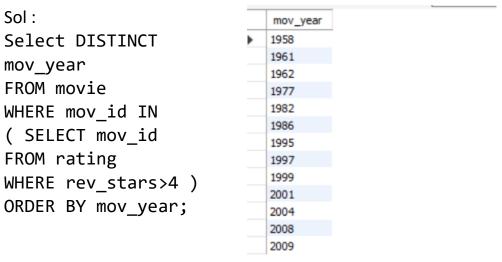
```
select dir_fname, dir_lname from director
where dir_id IN (
select dir_id from movie_direction
where mov id IN (
select mov id from movie
where mov_title = 'Eyes wide shut'));
269
270 • select dir_fname, dir_lname from director
272 select dir_id from movie_direction
273 $\display \text{ where mov_id IN (}
274 select mov id from movie
     where mov_title = 'Eyes wide shut'));
275
| Export: | Wrap Cell Content: IA
  dir_fname dir_lname
Stanley
```

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' Sol:

```
SELECT mov_title, mov_year, mov_dt_rel, dir_fname, dir_lname, act_lname
FROM movie m, movie_direction md, director d, rating ra, reviewer r, actor a, movie_cast mc
```

```
WHERE m.mov id=md.mov id
     AND md.dir_id=d.dir_id
      AND m.mov id=ra.mov id
      AND ra.rev id=r.rev id
      AND m.mov_id=mc.mov_id
      AND mc.act id=a.act id
      AND r.rev name ='Neal Wruck';
278 • SELECT mov_title, mov_year, mov_dt_rel, dir_fname, dir_lname, act_fname, act_lname
279
     FROM movie m, movie_direction md, director d, rating ra, reviewer r, actor a, movie_cast mc
280
    WHERE m.mov_id=md.mov_id
281 AND md.dir_id=d.dir_id
    AND m.mov_id=ra.mov_id
282
283
     AND ra.rev_id=r.rev_id
     AND m.mov_id=mc.mov_id
285
     AND mc.act id=a.act id
     AND r.rev_name ='Neal Wruck';
286
Export: Wrap Cell Content: TA
  mov_title mov_year mov_dt_rel dir_fname dir_lname act_fname act_lname
              1974-08-09 Roman
```

8. Write a query in SQL to find all the years which produced at least one movie and that received a rating of more than 4 stars.



9. Write a query in SQL to find the name of all movies who have rated their ratings with a NULL value Sol:

```
SELECT re.rev_name as REVIEVER,m.mov_title as MOVIENAME FROM movie m
```

```
INNER JOIN rating r
    ON r.mov_id = m.mov_id
    INNER JOIN reviewer re
    ON re.rev id = r.rev id
    WHERE r.rev_stars IS NULL;
295
     SELECT re.rev_name as REVIEVER, m.mov_title as MOVIENAME
297
      FROM movie m
      INNER JOIN rating r
298
299
      ON r.mov_id = m.mov_id
     INNER JOIN reviewer re
300
      ON re.rev_id = r.rev_id
301
302
      WHERE r.rev_stars IS NULL;
<
Export: Wrap Cell Content: IA
  REVIEVER MOVIENAME
  Neal Wruck
         Chinatown
  Scott LeBrun Trainspotting
```

10. Write a query in SQL to find the name of movies who were directed by 'David'

Sol:

```
select m.mov_title,d.dir_fname,d.dir_lname
FROM movie m
INNER JOIN movie_direction md
ON m.mov_id = md.mov_id
INNER JOIN director d
ON d.dir_id = md.dir_id
WHERE d.dir_fname = 'David';
```

```
303
       select m.mov_title,d.dir_fname,d.dir_lname
304 •
305
       FROM movie m
       INNER JOIN movie_direction md
306
307
       ON m.mov id = md.mov id
       INNER JOIN director d
308
       ON d.dir_id = md.dir_id
       WHERE d.dir_fname = 'David';
310
Export: Wrap Cell Content: ‡A
   mov_title
               dir_fname
                       dir_Iname
  Lawrence of arabia David
```

INNER JOIN movie m

act_fname act_lname role

ON m.mov_id = mc.mov_id

WHERE m.mov title='Boogie Nights';

Wahlberg Eddie adams Boogie Nights

mov_title

316 317

318

▶ Mark

11. Write a query in SQL to list the first and last names of all the actors who were cast in the movie 'Boogie Nights', and the roles they played in that production.

```
Sol:
     select
     a.act_fname,a.act_lname,mc.role,m.mov_title
     FROM actor a
     INNER JOIN movie_cast mc
     ON a.act id = mc.act id
     INNER JOIN movie m
     ON m.mov id = mc.mov id
     WHERE m.mov_title='Boogie Nights';
311
312 • select a.act_fname,a.act_lname,mc.role,m.mov_title
313
     FROM actor a
314
     INNER JOIN movie_cast mc
     ON a.act_id = mc.act_id
315
```

Export: Wrap Cell Content: IA