SBA-3 MARIA TOMY 210913

- 1. Create Database project_movie_data and deploy table data according to ER diagram.
- 2. Create 9 tables which are presented in ER model and load the data with their foreign key and primary key values.

Creating Databases and Tables

- 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));
- create table director (dir_id int not null, dir_fname char(20), dir_lname char(20), primary key (dir_id));
- reate table genres (gen id int not null, gen title char(20), primary key(gen id));
- create table reviewer (rev_id int not null, rev_name char(30), primary key(rev_id));
- create table movie (mov_id int not null, mov_title char(50), mov_year int, mov_time integer, mov_lang char(50), mov_dt_rel date, mov_rel_country char(5),primary key(mov_id));
- 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));
- 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));
- create table rating (mov_id int not null, rev_id int not null, 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));
- 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));

Query for inserting on table actor:

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'),(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');

| act_id | act_fname | act_Iname | act_gender |
|--------|-----------|------------|------------|
| 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 |
| 115 | Kate | Winslet | F |
| 116 | Robin | Williams | M |
| 117 | Jon | Voight | M |
| 118 | Ewan | McGregor | M |
| 119 | Christian | Bale | M |
| 120 | Maggie | Gyllenhaal | F |
| 121 | Dev | Patel | M |
| 122 | Sigourney | Weaver | F |
| 123 | David | Aston | M |
| 124 | Ali | Astin | F |

Query for inserting on table director:

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 Anderson'),(211, 'Woody', 'Allen'),(212, 'Hayao', 'Miyazaki'),(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', 'Tarkovsky'),(223, 'Peter', 'Jackson');

| dir_id | dir_fname | dir_Iname |
|--------|-------------|-----------------|
| 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 Anderson |
| 211 | Woody | Allen |
| 212 | Hayao | Miyazaki |
| 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 | Tarkovsky |
| 223 | Peter | Jackson |

Query for inserting on table genres:

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');

| gen_id | gen_title |
|--------|-----------|
| 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 |

Query for inserting on table movie:

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', null, 'UK'), (908, 'The Usual Suspects', 1995, 106, 'English', '1995-08-25', 'UK'), (909, 'Chinatown', 1974, 130, 'English', '1974-08-09', 'UK'),(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 Redemption', 1994, 142, 'English', '1995-02-17', 'UK'),(914, 'American Beauty', 1999, 122, 'English', null, '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'), (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', null, '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'),(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'), (925, 'Braveheart', 1995, 178, 'English', '1995-09-08', 'UK');

| mov_id | mov_title | mov_year | mov_time | mov_lang | mov_dt_rel | mov_rel_country |
|--------|---------------------|----------|----------|----------|------------|-----------------|
| 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 | NULL | UK |
| 908 | The Usual Suspects | 1995 | 106 | English | 1995-08-25 | UK |
| 909 | Chinatown | 1974 | 130 | English | 1974-08-09 | UK |
| 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 R | 1994 | 142 | English | 1995-02-17 | UK |
| 914 | American Beauty | 1999 | 122 | English | NULL | 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 |
| 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 | NULL | 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 |
| | | | | | | |

Query for inserting on table movie_cast:

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');

| act_id | mov_id | role |
|--------|--------|-----------------------|
| 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 |

Query for inserting on table movie_direction:

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);

| dir_id | mov_id |
|--------|--------|
| 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 |

Query for inserting on table movie_genres:

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);

| mov_id | gen_id |
|--------|--------|
| 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 |

Query for inserting on table reviewer:

insert into reviewer (rev_id, rev_name) values (9001, 'Righty Sock'),(9002, 'Jack Malvern'), (9003, 'Flagrant Baronessa'),(9004, 'Alec Shaw'),(9005,null),(9006, 'Victor Woeltjen'),(9007, 'Simon Wright'),(9008, 'Neal Wruck'),(9009, 'Paul Monks'),(9010, 'Mike Salvati'),(9011,null), (9012, 'Wesley S. Walker'),(9013, 'Sasha Goldshtein'),(9014, 'Josh Cates'),(9015, 'Krug Stillo'), (9016, 'Scott LeBrun'),(9017, 'Hannah Steele'),(9018, 'Vincent Cadena'), (9019, 'Brandt Sponseller'),(9020, 'Richard Adams');

| rev_id | rev_name |
|--------|--------------------|
| 9001 | Righty Sock |
| 9002 | Jack Malvern |
| 9003 | Flagrant Baronessa |
| 9004 | Alec Shaw |
| 9005 | NULL |
| 9006 | Victor Woeltjen |
| 9007 | Simon Wright |
| 9008 | Neal Wruck |
| 9009 | Paul Monks |
| 9010 | Mike Salvati |
| 9011 | NULL |
| 9012 | Wesley S. Walker |
| 9013 | Sasha Goldshtein |
| 9014 | Josh Cates |
| 9015 | Krug Stillo |
| 9016 | Scott LeBrun |
| 9017 | Hannah Steele |
| 9018 | Vincent Cadena |
| 9019 | Brandt Sponseller |
| 9020 | Richard Adams |

Query for inserting on table rating:

INSERT INTO rating (mov_id, rev_id, rev_stars, num_o_ratings) VALUES (901, 9001, 8.4, 263575),(902, 9002, 7.9, 20207),

(903, 9003, 8.3, 202778),(906, 9005, 8.2, 484746),(924, 9006, 7.3, null),(908, 9007, 8.6, 779489),(909, 9008, null, 227235),

(910, 9009, 3, 195961),(911, 9010, 8.1, 203875),(912, 9011, 8.4, null),(914, 9013, 7, 862618),(915, 9001, 7.7, 830095),

(916, 9014, 4, 642132),(925, 9015, 7.7, 81328),(918, 9016, null, 580301),(920, 9017, 8.1, 609451),(921, 9018, 8, 667758),

(922, 9019, 8.4, 511613), (923, 9020, 6.7, 13091);

| 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 | HULL | 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 |

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

SELECT mov_title

FROM movie WHERE mov_id=(SELECT mov_id FROM movie_genres WHERE gen_id in (SELECT gen_id FROM genres WHERE gen_title='Horror'));

| | mov_title | | |
|---|---------------|--|--|
| • | The Innocents | | |

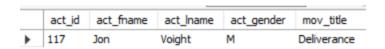
4. Write a query in SQL to find the name of all reviewers who have rated 8 or more stars?

select rev_name from reviewer rv INNER JOIN rating rt on rv.rev_id = rt.rev_id where rt.rev_stars >= 8.00;



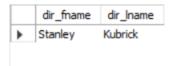
5. Write a query in SQL to list all the information of the actors who played a role in the movie 'Deliverance'

select a.act_id,a.act_fname,a.act_lname,a.act_gender,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 = '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 m where mov_title = 'Eyes Wide Shut'));



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 Iname from movie m, director d, actor a, movie direction md, rating rt, reviewer rv, movie cast mc where md.dir id = d.dir id and mc.act_id = a.act_id and m.mov id = md.mov id and m.mov id = mc.mov id and m.mov_id = rt.mov_id and rt.rev id = rv.rev id and rv.rev name = 'Neal Wruck'; act_Iname mov_title mov_year mov_dt_rel dir_fname dir_Iname act_fname

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.

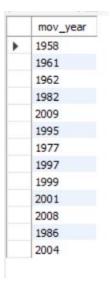
Polanski

Jack

Nicholson

select DISTINCT mov_year from movie where mov_id in (select mov_id from rating where rev_stars>4.00);

1974-08-09 Roman



Chinatown 1974

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

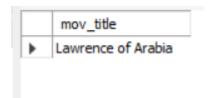
select mov_title from movie
where mov id in (select mov id from rating where rev stars is null);



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

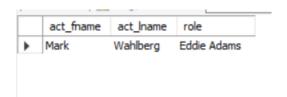
select mov title

from movie m inner join movie_direction md on m.mov_id = md.mov_id inner join director d on md.dir_id = d.dir_id where dir_lname = 'david' or dir_fname = 'david';



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.

select a.act_fname, a.act_lname, mc.role from actor a inner join movie_cast mc on a.act_id = mc.act_id inner join movie m on mc.mov_id = m.mov_id where mov_title = 'Boogie Nights';



12. Find the name of the actor who have worked in more than one movie

select mov_title from movie
where mov_id in (select mov_id from movie_cast
where act_id in (select act_id from actor
where act_id IN (select act_id from movie_cast group by act_id having
COUNT(act_id)>1)));

