DATA MODELLING

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30362043 MIT federation

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Q.1

```
Create table actor
(
 act_id integer
act_fname char (20),
act_lname char (20),
act_gender char  (1),
Primary key (act_id)
);
```

Create table director

```
(
 dir_id integer,
mov_id integer,
Primary key (dir_id)
);
Create reviewer
(
 rev_id integer,
rev_name char (30),
Primary key (rev_id)
);

Create table actor
(
 gen_id integer,
gen_titlechar (20),
Primary key (gen_id)
);
Create table movie
(
 mov_id integer,
mov_title char (50),
mov_year integer,
mov_time integer,
mov_lang char(50)
mov_dt_rel date,
mov_rel_country char(5),
Primary key (mov_id)
);
```

```
create table rating
(
        mov_id integer references movie (mov_id),
        rev_id integer references  reviewer(rev_id),
        rev_stars varchar(30),
        num_0_rating integer
);
create table movie_direction
(
        dir_id integer REFERENCES director (dir_id),
        mov_id integer REFERENCEs movie (mov_id)
);
create table movie_cast
(
        act_id integer references actor (act_id),
        mov_id integer references movie (mov_id),
        role varchar
)

create table  movie_genres
(
        gen_id integer references genres (gen_id),
        mov_id integer references movie (mov_id)
)
```

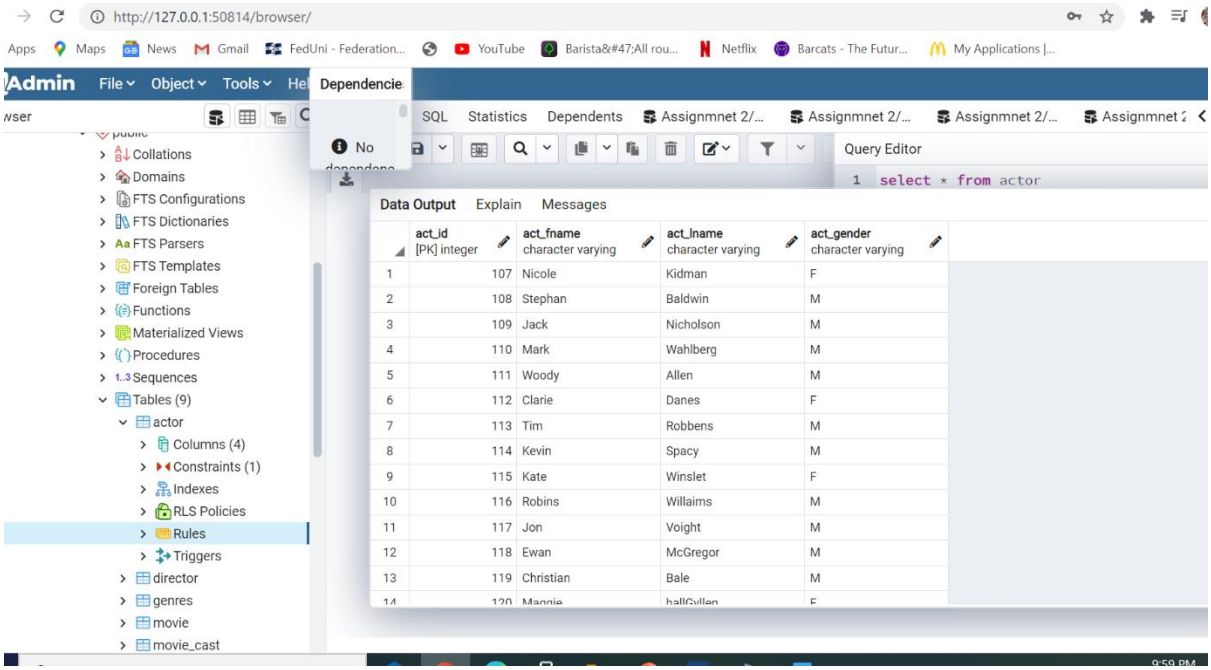
Q.2

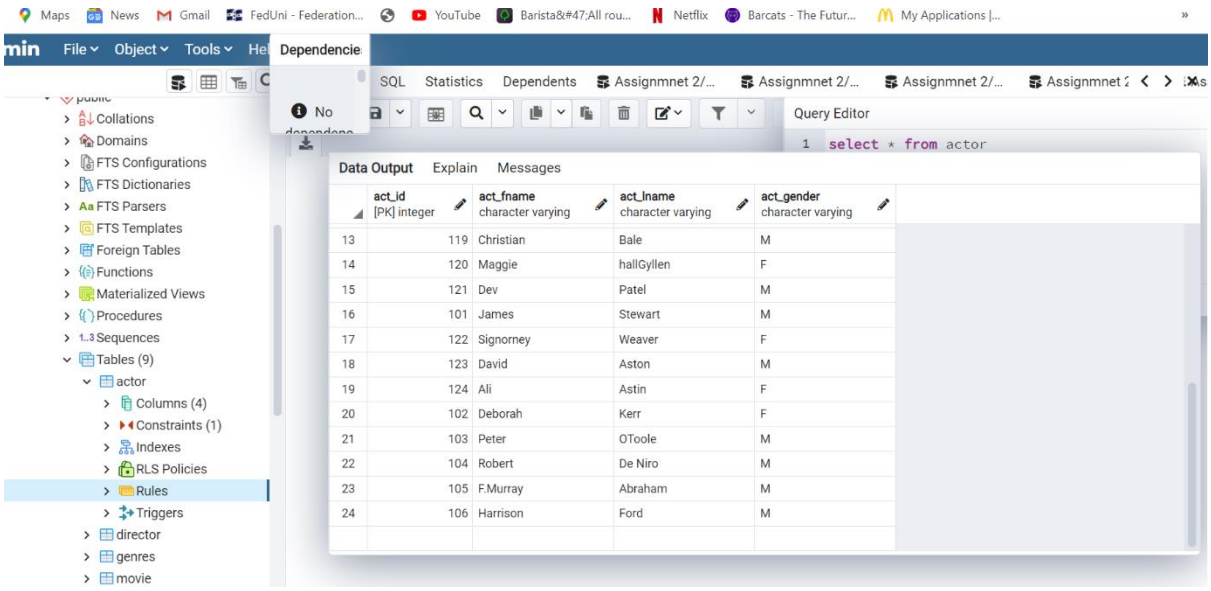
```
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('101', 'James', 'Stewart', 'M');
INSERT INTO public.actor(
```

```
        act_id, act_fname, act_lname, act_gender)
        VALUES ('102', 'Deborah', 'Kerr', 'F');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('103', 'Peter', 'OToole', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('104', 'Robert', 'De Niro', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('105', 'F.Murray', 'Abraham', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('106', 'Harrison', 'Ford', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('107', 'Nicole', 'Kidman', 'F');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('108', 'Stephan', 'Baldwin', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('109', 'Jack', 'Nicholson');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('110', 'Mark', 'Wahlberg', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('111', 'Woody', 'Allen', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
```

```
        VALUES ('112', 'Clarie', 'Danes', 'F');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('113', 'Tim', 'Robbens', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('114', 'Kevin', 'Spacy', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('115', 'Kate', 'Winslet', 'F');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('116', 'Robins', 'Willaims', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('117', 'Jon', 'Voight', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('118', 'Ewan', 'McGregor', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('119', 'Christian', 'Bale', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('120', 'Maggie', 'hallGyllen', 'F');
        INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('121', 'Dev', 'Patel', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('122', 'Signorney', 'Weaver', 'F');
```

```
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('123', 'David', 'Aston', 'M');
INSERT INTO public.actor(
        act_id, act_fname, act_lname, act_gender)
        VALUES ('124', 'Ali', 'Astin', 'F');
```

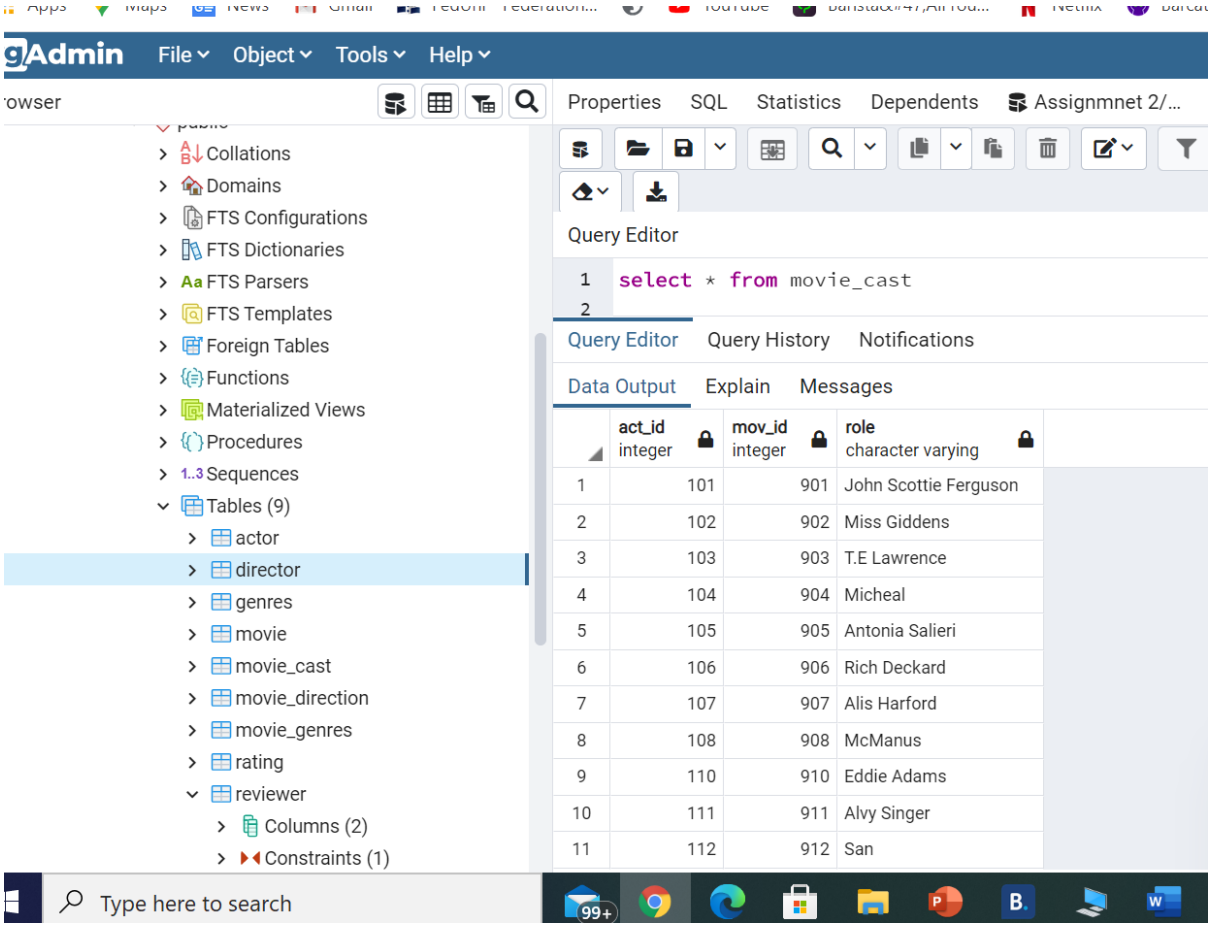





```
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('101', '901', 'John Scottie Ferguson');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('102', '902', 'Miss Giddens');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('103', '903', 'T.E Lawrence');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('104', '904', 'Micheal');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('105', '905', 'Antonia Salieri');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('106', '906', 'Rich Deckard');
INSERT INTO public.movie_cast(
```

```
        act_id, mov_id, role)
        VALUES ('107', '907', 'Alis Harford');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('108', '908', 'McManus');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('110', '910', 'Eddie Adams');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('111', '911', 'Alvy Singer');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('112', '912', 'San');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('113', '913', 'Andy Dufresne');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('114', '914', 'Lester Burnham');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('115', '915', 'Rose FeWitt Bukater');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('116', '916', 'Sean Maguire');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('117', '917', 'Ed');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
```

```
        VALUES ('118', '918', 'Renton');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('120', '920', 'ELizabeth Darko');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('121', '921', 'Older Jamel');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('122', '922', 'Ripley');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('123', '923', 'Bobby Darin');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('109', '909', 'J.J Gittes');
INSERT INTO public.movie_cast(
        act_id, mov_id, role)
        VALUES ('119', '919', 'Alfred Borden');
```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Collations
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FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Procedures
Sequences
Tables (9)
actor
director
genres
movie
movie_cast
movie_direction
movie_genres
rating
reviewer
Columns (2)
Constraints (1)
Query Editor
1 select * from movie_cast
2
Query Editor
Query History
Notifications
Data Output
Explain
Messages
act_id integer
mov_id integer
role character varying
1 101 901 John Scottie Ferguson
2 102 902 Miss Giddens
3 103 903 T.E Lawrence
4 104 904 Micheal
5 105 905 Antonia Salieri
6 106 906 Rich Deckard
7 107 907 Alis Harford
8 108 908 McManus
9 110 910 Eddie Adams
10 111 911 Alvy Singer
11 112 912 San
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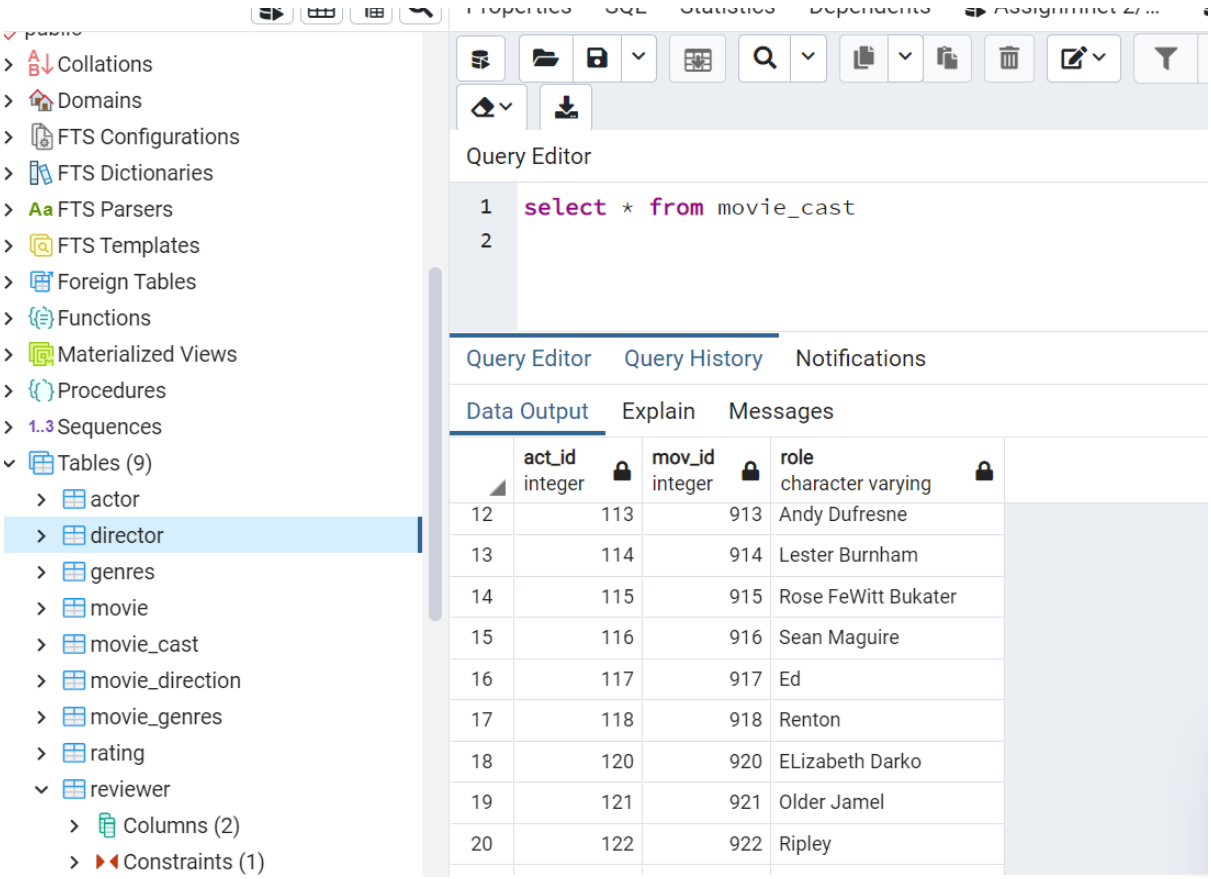
Collations
Domains
FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Procedures
Sequences
Tables (9)
actor
director
genres
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movie_cast
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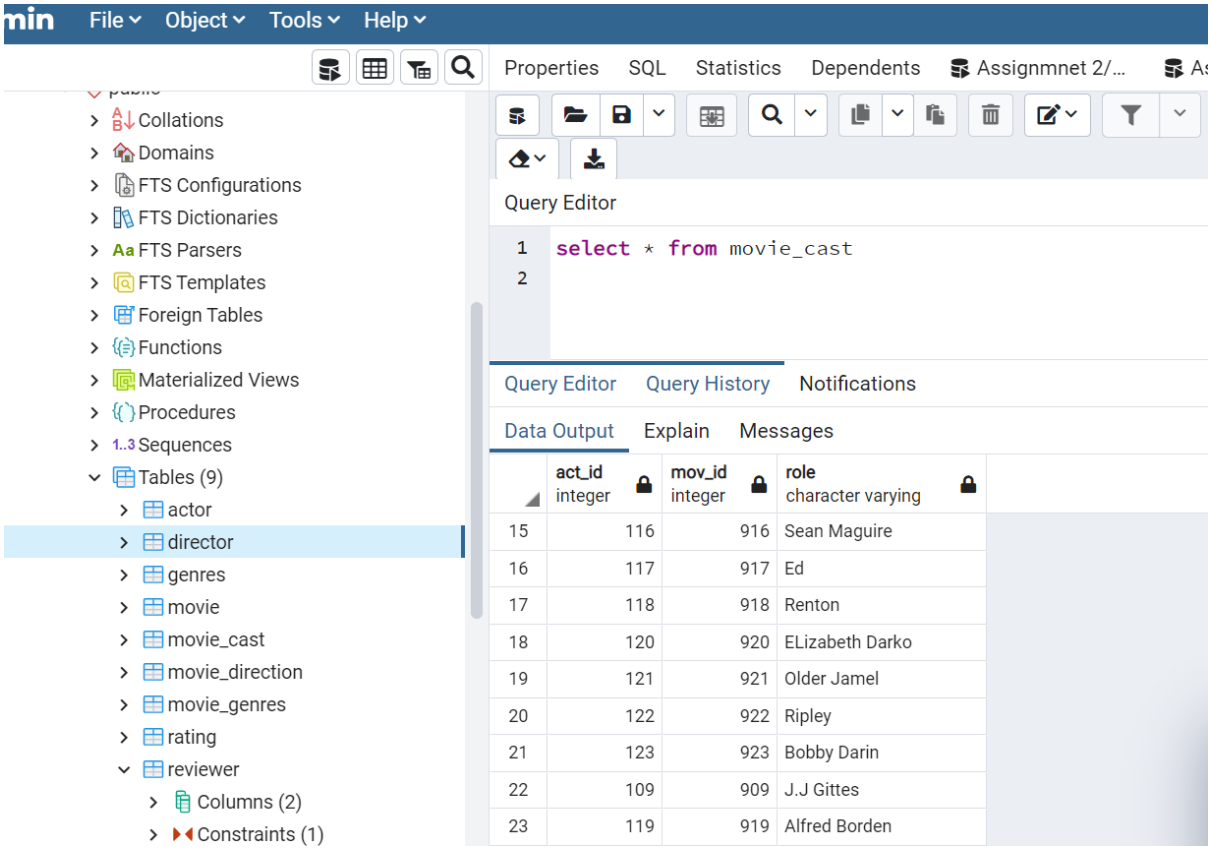
reviewer
Columns (2)
Constraints (1)
Query Editor
1 select * from movie_cast
2
Query Editor
Query History
Notifications
Data Output
Explain
Messages
act_id integer
mov_id integer
role character varying
12 113 913 Andy Dufresne
13 114 914 Lester Burnham
14 115 915 Rose FeWitt Bukater
15 116 916 Sean Maguire
16 117 917 Ed
17 118 918 Renton
18 120 920 ELizabeth Darko
19 121 921 Older Jamel
20 122 922 Ripley



INSERT INTO public.movie(

mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)

VALUES ('901', 'Vertigo', '1958', '128', 'English', '1958-08-21', 'UK');

INSERT INTO public.movie(

mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)

VALUES ('902', 'The Innocents', '1961', '100', 'English', '1962-02-19', 'SW');

INSERT INTO public.movie(

mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)

VALUES ('903', 'Lawremnce of Arabia', '1962', '216', 'English', '1962-12-11', 'UK');

INSERT INTO public.movie(

mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)

VALUES ('904', 'The Deer Hunter', '1978', '183', 'English', '1979-03-08', 'UK');

INSERT INTO public.movie(

mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)

VALUES ('905', 'Amadeus', '1984', '160', 'English', '1985-01-07', 'UK');

INSERT INTO public.movie(

mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)

```
        VALUES ('906', 'Blade Runner', '1982', '117', 'English', '1982-09-09', 'UK');
INSERT INTO public.movie(
        mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
        VALUES ('907', 'Eye WIde Shut', '1999', '159', 'English', '1995-08-25', 'UK');
INSERT INTO public.movie(
        mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
        VALUES ('908', 'The Usual Suspects', '1995', '159', 'English', '', 'UK');
INSERT INTO public.movie(
        mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
        VALUES ('909', 'Chinatown', '1974', '130', 'English', '1975-08-09', 'UK');
INSERT INTO public.movie(
        mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
        VALUES ('910', 'Boggie Nights', '1997', '155', 'English', '1998-02-16', 'UK');
INSERT INTO public.movie(
        mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
        VALUES ('911', 'Annie Hall', '1977', '93', 'English', '1977-04-20', 'USA');
INSERT INTO public.movie(
        mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
        VALUES ('912', 'Princess Mononoke', '1997', '155', 'Japanese', '2001-10-19', 'UK');
INSERT INTO public.movie(
        mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
        VALUES ('913', 'The Shawshank Redemption', '1994', '142', 'English', '1995-02-17', 'UK');
INSERT INTO public.movie(
        mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
        VALUES ('914', 'American Beauty', '1999', '122', 'English', '', 'UK');
INSERT INTO public.movie(
        mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
        VALUES ('915', 'Titanic', '1997', '194', 'English', '1998-01-23', 'UK');
INSERT INTO public.movie(
        mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
        VALUES ('916', 'Good Will Hunting', '1977', '126', 'English', '1998-06-03', 'UK');
```

```
INSERT INTO public.movie(
	mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
	VALUES ('917', 'Deliverance', '1972', '109', 'English', '1982-10-05', 'UK');
INSERT INTO public.movie(
	mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
	VALUES ('918', 'Trainspotting', '1966', '94', 'English', '1966-02-23', 'UK');
INSERT INTO public.movie(
	mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
	VALUES ('919', 'The Prestige', '2006', '130', 'English', '2006-11-10', 'UK');
INSERT INTO public.movie(
	mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
	VALUES ('920', 'Donnie Dark', '2001', '113', 'English', '', 'UK');
INSERT INTO public.movie(
	mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
	VALUES ('921', 'Slumdog Millionaire', '2008', '120', 'English', '2009-01-09', 'UK');
INSERT INTO public.movie(
	mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
	VALUES ('922', 'Aliens', '1986', '137', 'English', '1986-08-29', 'UK');
INSERT INTO public.movie(
	mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
	VALUES ('923', 'Beyound the Sea', '2004', '118', 'English', '2004-11-26', 'UK');
INSERT INTO public.movie(
	mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
	VALUES ('924', 'Avatar', '2009', '162', 'English', '2009-12-17', 'UK');
INSERT INTO public.movie(
	mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
	VALUES ('926', 'Seven Samuri', '1954', '207', 'Japanese', '1954-04-26', 'JP');
INSERT INTO public.movie(
	mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)
	VALUES ('927', 'Spirated Away', '2011', '125', 'Japanese', '2003-09-12', 'UK');
INSERT INTO public.movie(
```

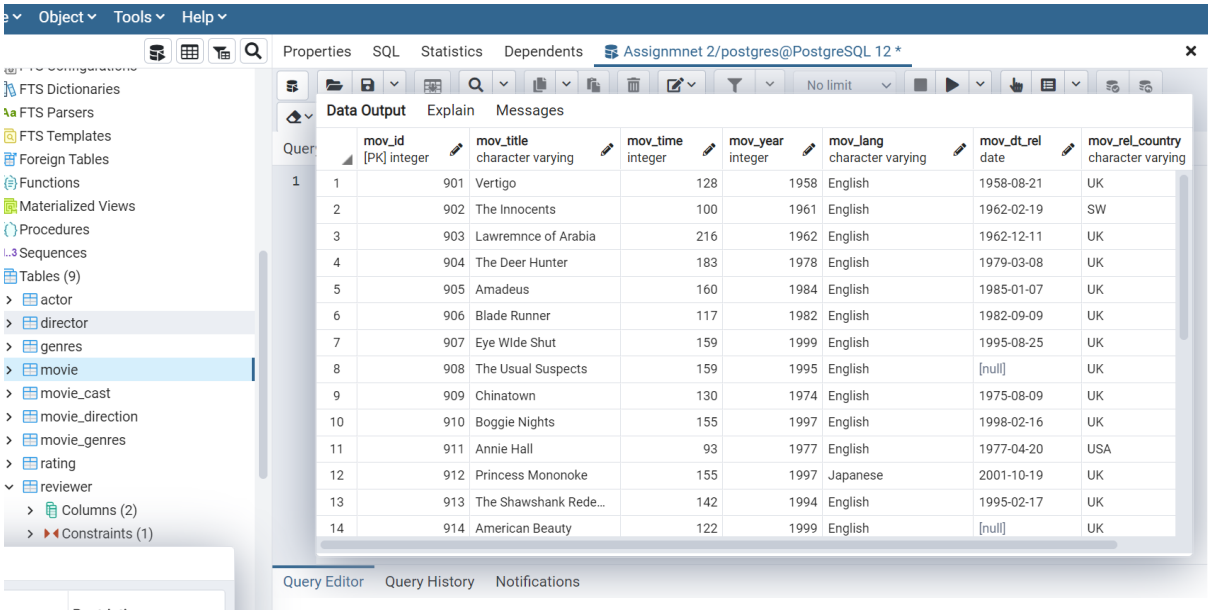
mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)

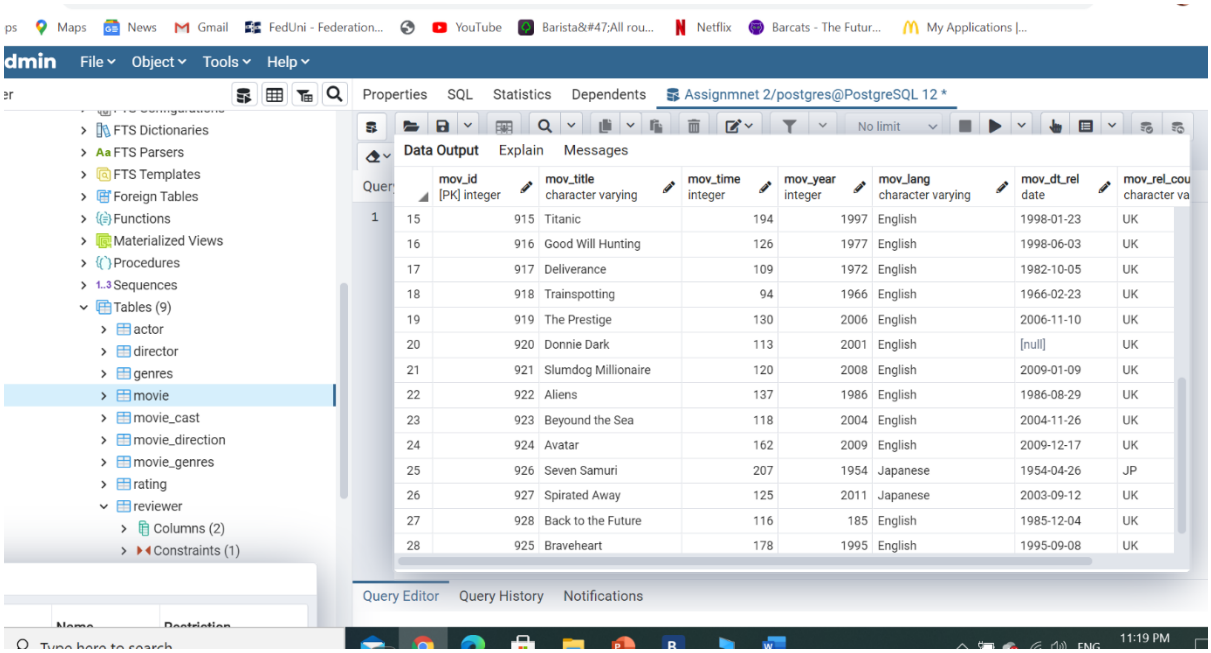
VALUES ('928', 'Back to the Future', '185', '116', 'English', '1985-12-04', 'UK');

INSERT INTO public.movie(

mov_id, mov_title, mov_year, mov_time, mov_lang, mov_dt_rel, mov_rel_country)

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





```
INSERT INTO public.director(
	dir_id, dir_fname, dir_lname)
	VALUES ('201', 'Fred', 'Caravanhitch');
INSERT INTO public.director(
	dir_id, dir_fname, dir_lname)
	VALUES ('202', 'Jackie', 'Claytonburry');
INSERT INTO public.director(
	dir_id, dir_fname, dir_lname)
	VALUES ('203', 'Greene', 'Lyon');
INSERT INTO public.director(
	dir_id, dir_fname, dir_lname)
	VALUES ('204', 'Miguel', 'Camino');
INSERT INTO public.director(
	dir_id, dir_fname, dir_lname)
	VALUES ('205', 'George', 'Forman');
INSERT INTO public.director(
	dir_id, dir_fname, dir_lname)
	VALUES ('206', 'Antartic', 'Scott');
INSERT INTO public.director(
	dir_id, dir_fname, dir_lname)
	VALUES ('207', 'Stanlee', 'Carbrick');
INSERT INTO public.director(
	dir_id, dir_fname, dir_lname)
	VALUES ('208', 'Bryon', 'Sanger');
INSERT INTO public.director(
	dir_id, dir_fname, dir_lname)
	VALUES ('209', 'Roman', 'Polanski');
```

```
INSERT INTO public.director(
        dir_id, dir_fname, dir_lname)
        VALUES ('210', 'Paul', 'Thomus Anderson');
INSERT INTO public.director(
        dir_id, dir_fname, dir_lname)
        VALUES ('211', 'Woody', 'Allan');
INSERT INTO public.director(
        dir_id, dir_fname, dir_lname)
        VALUES ('212', 'Hayao', 'Miyazaki');
INSERT INTO public.director(
        dir_id, dir_fname, dir_lname)
        VALUES ('213', 'Frank', 'Darabont');
INSERT INTO public.director(
        dir_id, dir_fname, dir_lname)
        VALUES ('214', 'Sam', 'Mandes');
INSERT INTO public.director(
        dir_id, dir_fname, dir_lname)
        VALUES ('215', 'James', 'Cameron');
INSERT INTO public.director(
        dir_id, dir_fname, dir_lname)
        VALUES ('216', 'Fred', 'Gun Van Sant');
INSERT INTO public.director(
        dir_id, dir_fname, dir_lname)
        VALUES ('217', 'John', 'Boreman');
INSERT INTO public.director(
        dir_id, dir_fname, dir_lname)
        VALUES ('218', 'Danne', 'Boyle');
INSERT INTO public.director(
        dir_id, dir_fname, dir_lname)
        VALUES ('219', 'Christoher', 'Nolan');
INSERT INTO public.director(
```

dir_id, dir_fname, dir_lname)

VALUES ('220', 'Richard', 'Kelly');

```
INSERT INTO public.director(
```

dir_id, dir_fname, dir_lname)

VALUES ('221', 'Kevin', 'Spacey');

```
INSERT INTO public.director(
```

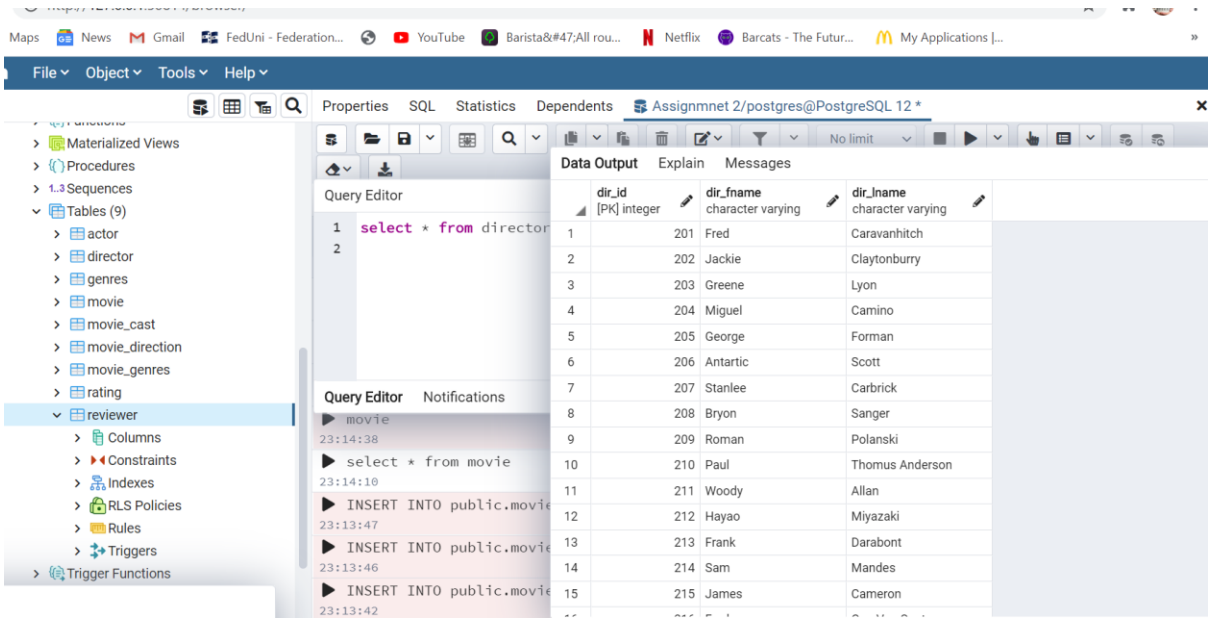
dir_id, dir_fname, dir_lname)

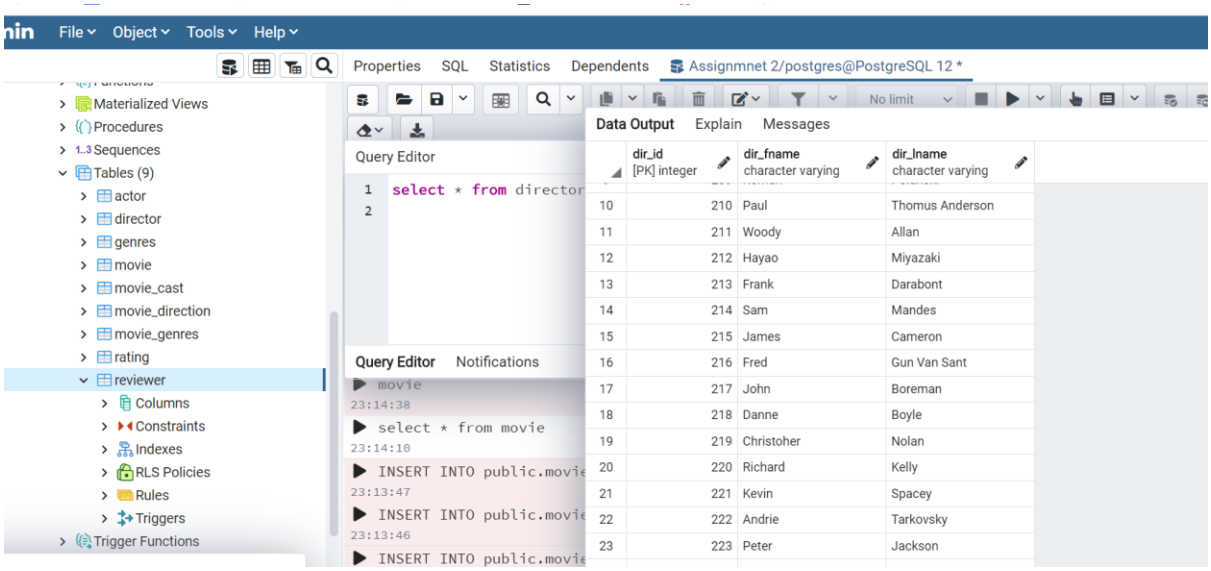
VALUES ('222', 'Andrie', 'Tarkovsky');

```
INSERT INTO public.director(
```

dir_id, dir_fname, dir_lname)

VALUES ('223', 'Peter', 'Jackson');

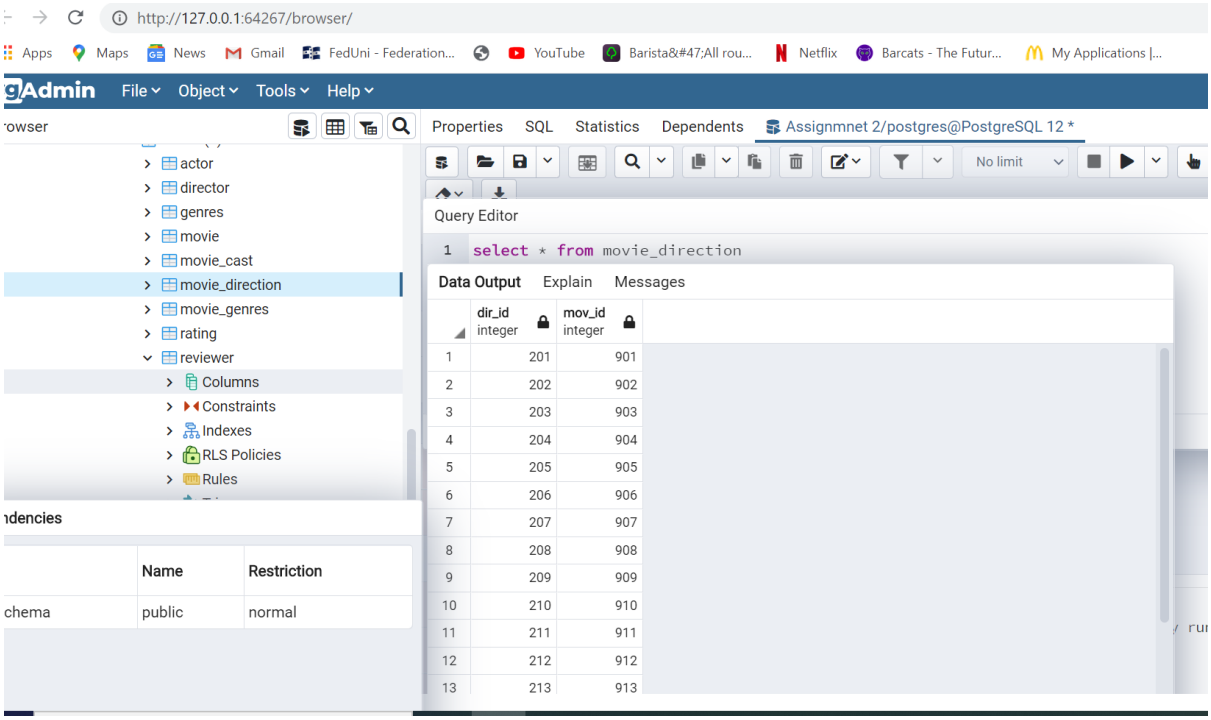


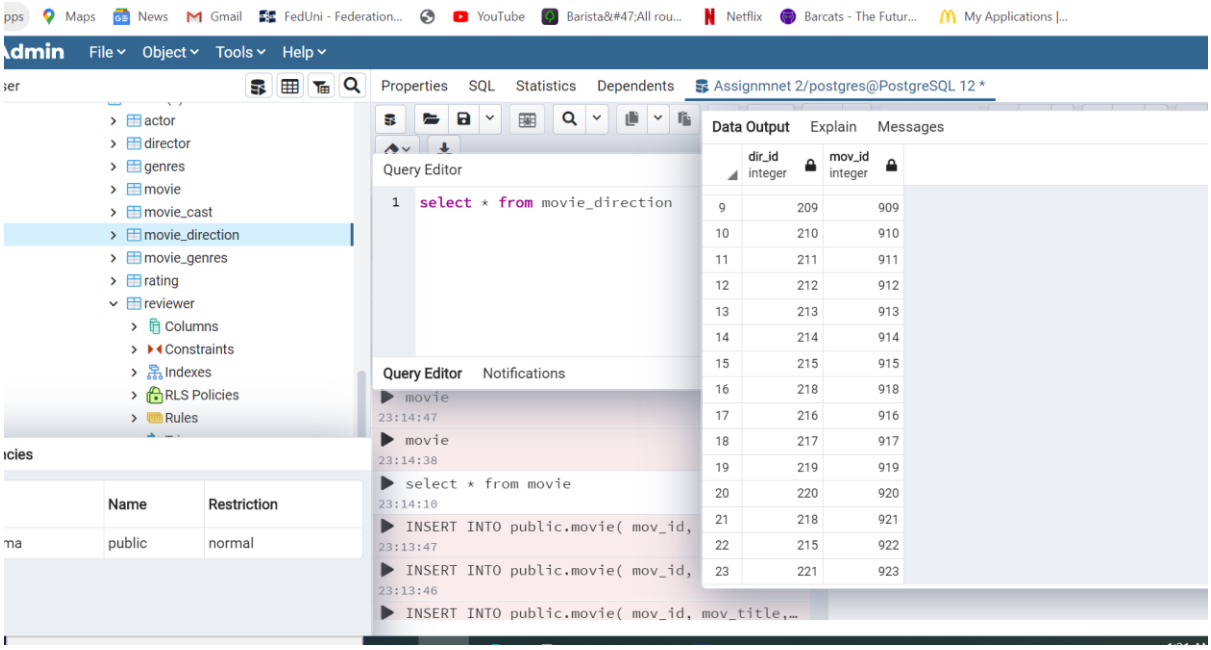



```
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('201', '901');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('202', '902');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('203', '903');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('204', '904');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('205', '905');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('206', '906');
INSERT INTO public.movie_direction(
```

```
        dir_id, mov_id)
        VALUES ('207', '907');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('208', '908');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('209', '909');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('210', '910');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('211', '911');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('212', '912');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('213', '913');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('214', '914');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('215', '915');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('218', '918');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
```

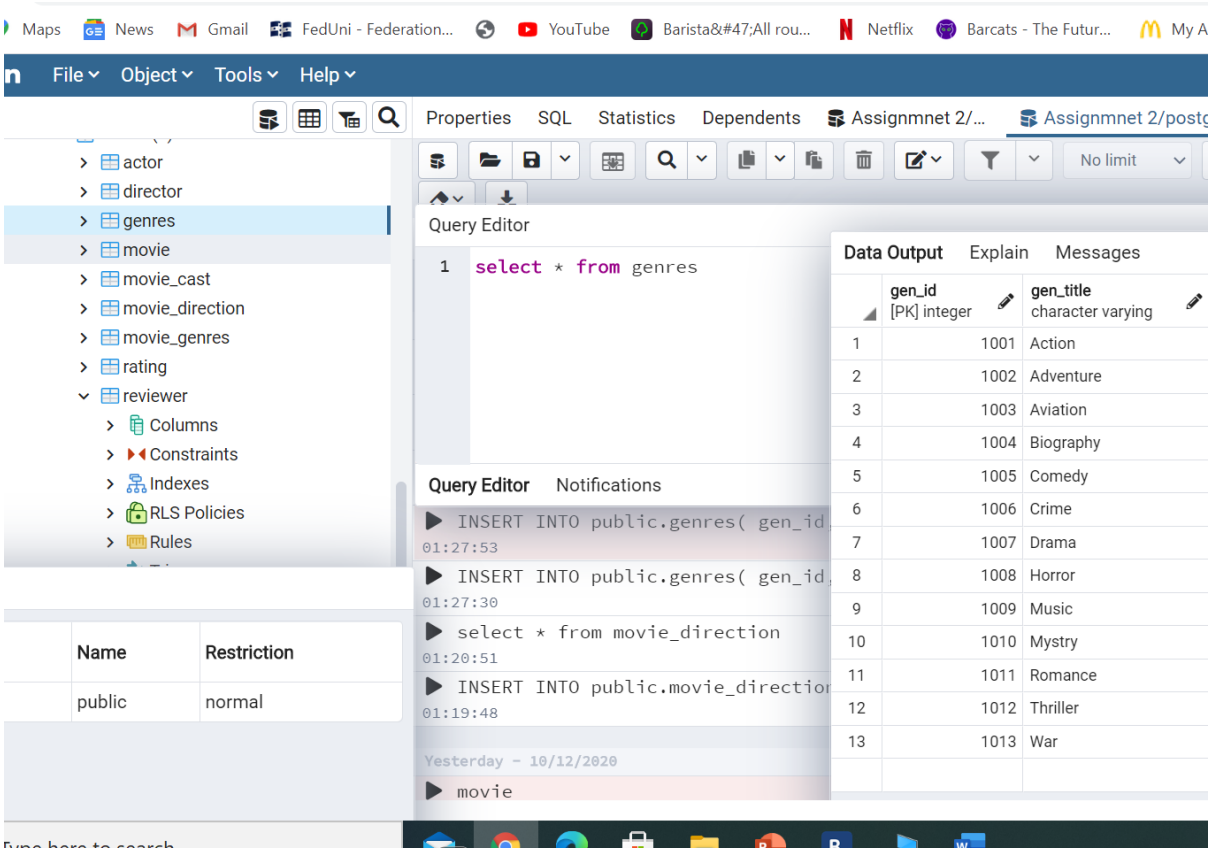
```
        VALUES ('216', '916');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('217', '917');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('219', '919');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('220', '920');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('218', '921');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('215', '922');
INSERT INTO public.movie_direction(
        dir_id, mov_id)
        VALUES ('221', '923');
```






```
INSERT INTO public.genres(
        gen_id, gen_title)
        VALUES ('1001', 'Action');
INSERT INTO public.genres(
        gen_id, gen_title)
        VALUES ('1002', 'Adventure');
INSERT INTO public.genres(
        gen_id, gen_title)
        VALUES ('1003', 'Aviation');
INSERT INTO public.genres(
        gen_id, gen_title)
        VALUES ('1004', 'Biography');
INSERT INTO public.genres(
        gen_id, gen_title)
        VALUES ('1005', 'Comedy');
INSERT INTO public.genres(
```

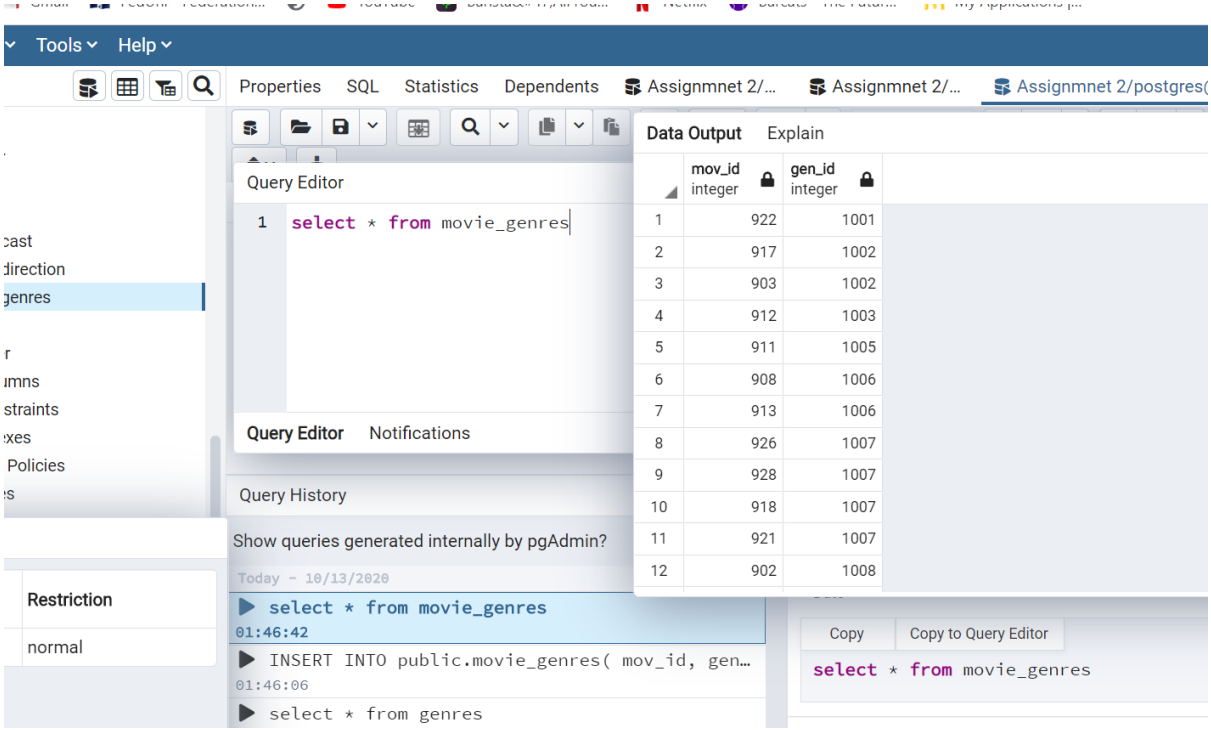
```
        gen_id, gen_title)
        VALUES ('1006', 'Crime');
INSERT INTO public.genres(
        gen_id, gen_title)
        VALUES ('1007', 'Drama');
INSERT INTO public.genres(
        gen_id, gen_title)
        VALUES ('1008', 'Horror');
INSERT INTO public.genres(
        gen_id, gen_title)
        VALUES ('1009', 'Music');
INSERT INTO public.genres(
        gen_id, gen_title)
        VALUES ('1010', 'Mystry');
INSERT INTO public.genres(
        gen_id, gen_title)
        VALUES ('1011', 'Romance');
INSERT INTO public.genres(
        gen_id, gen_title)
        VALUES ('1012', 'Thriller');
INSERT INTO public.genres(
        gen_id, gen_title)
        VALUES ('1013', 'War');
```

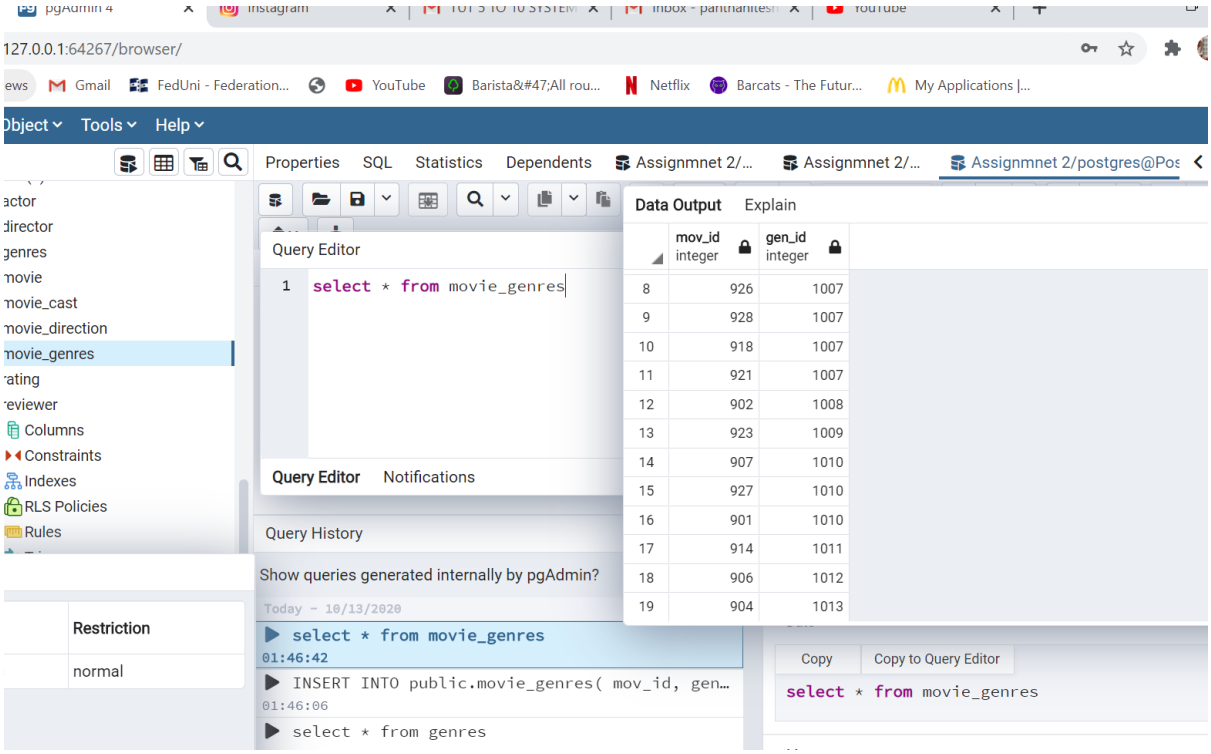



```
INSERT INTO public.movie_genres(
            mov_id, gen_id)
            VALUES ('922', '1001');
INSERT INTO public.movie_genres(
            mov_id, gen_id)
            VALUES ('917', '1002');
INSERT INTO public.movie_genres(
            mov_id, gen_id)
            VALUES ('903', '1002');
INSERT INTO public.movie_genres(
            mov_id, gen_id)
            VALUES ('912', '1003');
INSERT INTO public.movie_genres(
            mov_id, gen_id)
```

```
        VALUES ('911', '1005');
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('908', '1006');
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('913', '1006');
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('926', '1007');
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('928', '1007');
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('918', '1007');
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('921', '1007');
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('902', '1008');
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('923', '1009');
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('907', '1010');
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('927', '1010');
```

```
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('901', '1010');
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('914', '1011');
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('906', '1012');
INSERT INTO public.movie_genres(
        mov_id, gen_id)
        VALUES ('904', '1013');
```

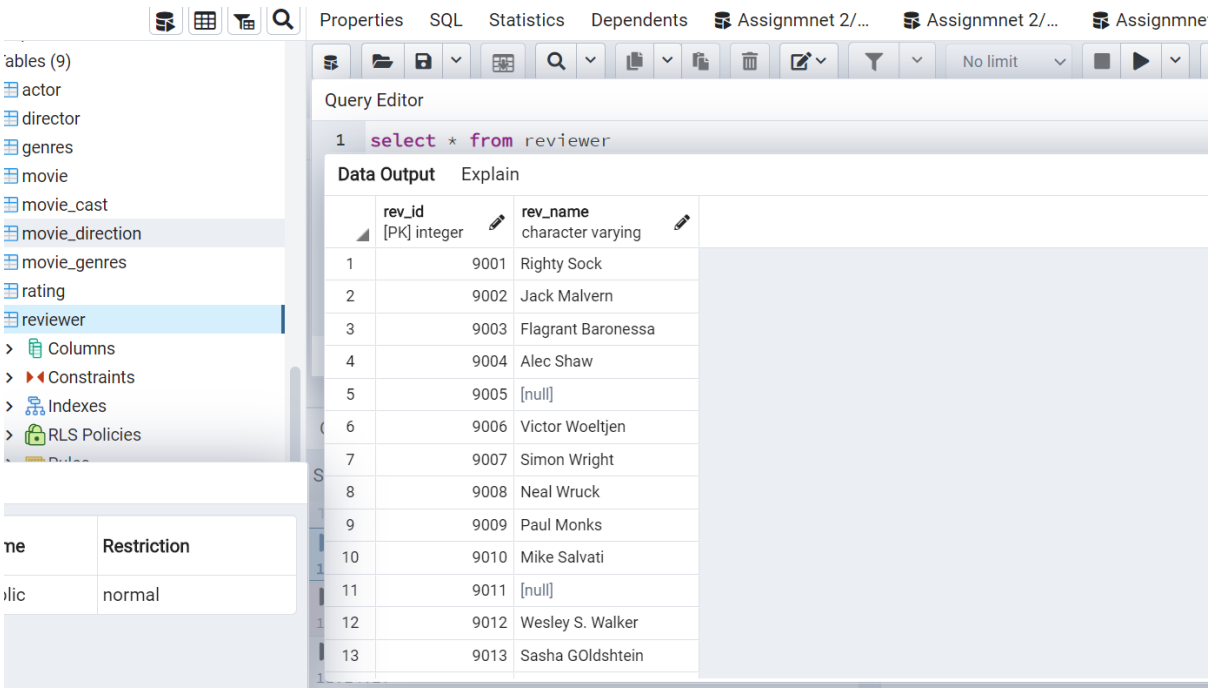


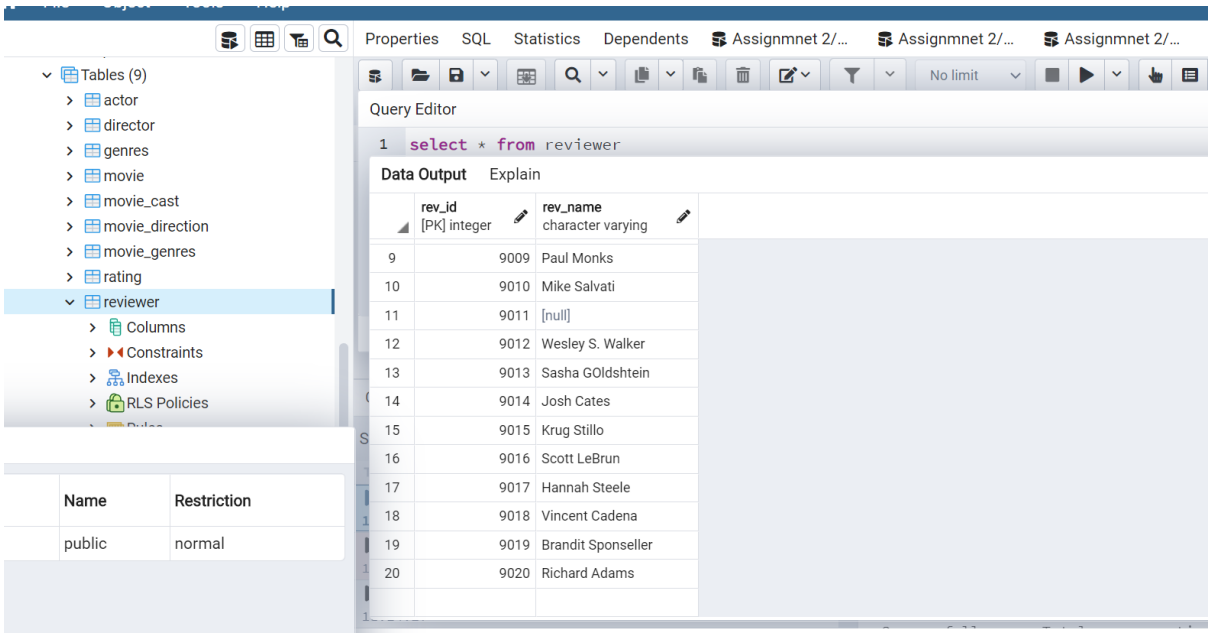



```
INSERT INTO public.reviewer(
        rev_id, rev_name)
        VALUES ('9001', 'Righty Sock');
INSERT INTO public.reviewer(
        rev_id, rev_name)
        VALUES ('9002', 'Jack Malvern');
INSERT INTO public.reviewer(
        rev_id, rev_name)
        VALUES ('9003', 'Flagrant Baronessa');
INSERT INTO public.reviewer(
        rev_id, rev_name)
        VALUES ('9004', 'Alec Shaw');
INSERT INTO public.reviewer(
        rev_id)
        VALUES ('9005');
INSERT INTO public.reviewer(
        rev_id, rev_name)
        VALUES ('9006', 'Victor Woeltjen');
```

```
INSERT INTO public.reviewer(
	rev_id, rev_name)
	VALUES ('9007', 'Simon Wright');
INSERT INTO public.reviewer(
	rev_id, rev_name)
	VALUES ('9008', 'Neal Wruck');
INSERT INTO public.reviewer(
	rev_id, rev_name)
	VALUES ('9009', 'Paul Monks');
INSERT INTO public.reviewer(
	rev_id, rev_name)
	VALUES ('9010', 'Mike Salvati');
INSERT INTO public.reviewer(
	rev_id)
	VALUES ('9011');
INSERT INTO public.reviewer(
	rev_id, rev_name)
	VALUES ('9012', 'Wesley S. Walker');
INSERT INTO public.reviewer(
	rev_id, rev_name)
	VALUES ('9013', 'Sasha GOldshtein');
INSERT INTO public.reviewer(
	rev_id, rev_name)
	VALUES ('9014', 'Josh Cates');
INSERT INTO public.reviewer(
	rev_id, rev_name)
	VALUES ('9015', 'Krug Stillo');
INSERT INTO public.reviewer(
	rev_id, rev_name)
	VALUES ('9016', 'Scott LeBrun');
INSERT INTO public.reviewer(
```

```
        rev_id, rev_name)
        VALUES ('9017', 'Hannah Steele');
INSERT INTO public.reviewer(
        rev_id, rev_name)
        VALUES ('9018', 'Vincent Cadena');
INSERT INTO public.reviewer(
        rev_id, rev_name)
        VALUES ('9019', 'Brandit Sponseller');
INSERT INTO public.reviewer(
        rev_id, rev_name)
        VALUES ('9020', 'Richard Adams');
```






```
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars, num_o_rating)
        VALUES ('901', '9001', '8.40', '263575');
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars, num_0_rating)
        VALUES ('902', '9002', '7.90', '20207');
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars, num_0_rating)
        VALUES ('903', '9003', '8.30', '202778');
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars, num_0_rating)
        VALUES ('906', '9005', '8.20', '484746');
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars)
        VALUES ('924', '9006', '7.30');
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars, num_0_rating)
        VALUES ('908', '9007', '8.60', '779489');
```

```
INSERT INTO public.rating(
        rev_id, mov_id, num_0_rating)
        VALUES ('909', '9008', '227235');
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars, num_0_rating)
        VALUES ('910', '9009', '3.00', '195961');
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars, num_0_rating)
        VALUES ('911', '9010', '8.10', '203875');
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars)
        VALUES ('912', '9011', '8.40');
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars, num_0_rating)
        VALUES ('914', '9013', '7.00', '862618');
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars, num_0_rating)
        VALUES ('915', '9001', '7.70', '830095');
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars)
        VALUES ('916', '9014', '4.40',);
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars, num_0_rating)
        VALUES ('925', '9015', '7.70', '81328');
INSERT INTO public.rating(
        rev_id, mov_id, num_0_rating)
        VALUES ('918', '9016', '580301');
INSERT INTO public.rating(
        rev_id, mov_id, rev_stars, num_0_rating)
        VALUES ('920', '9017', '8.10', '609451');
INSERT INTO public.rating(
```

rev_id, mov_id, rev_stars, num_0_rating)

VALUES ('921', '9018', '8.00', '609451');

INSERT INTO public.rating(

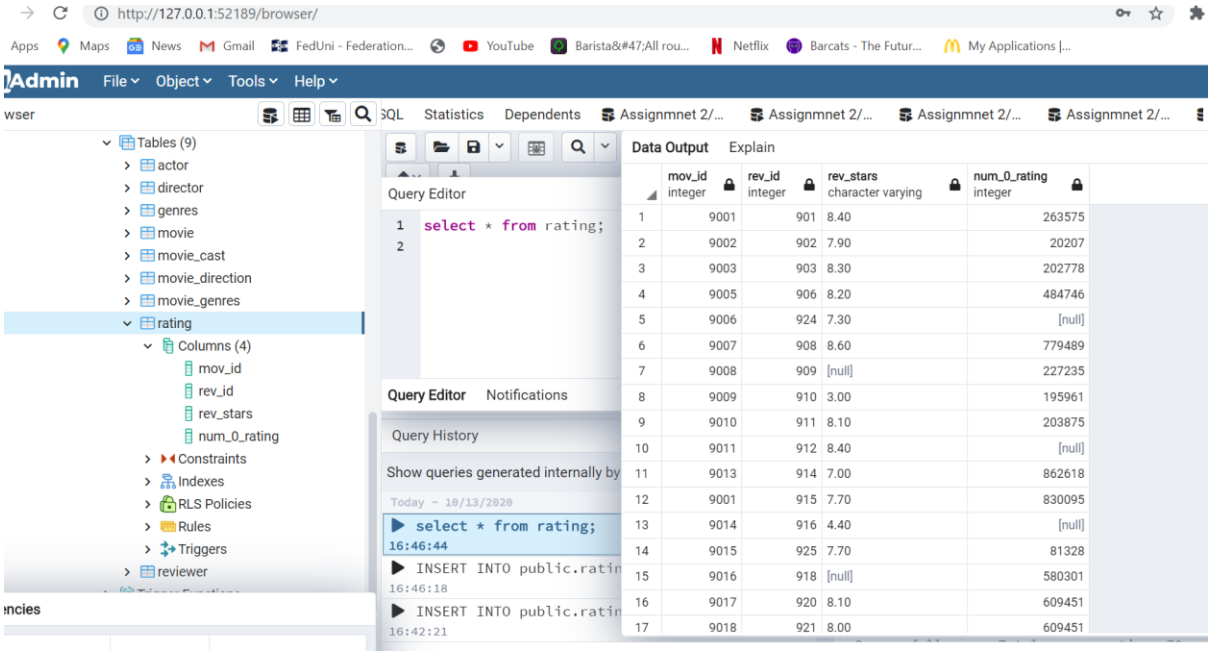
rev_id, mov_id, rev_stars, num_0_rating)

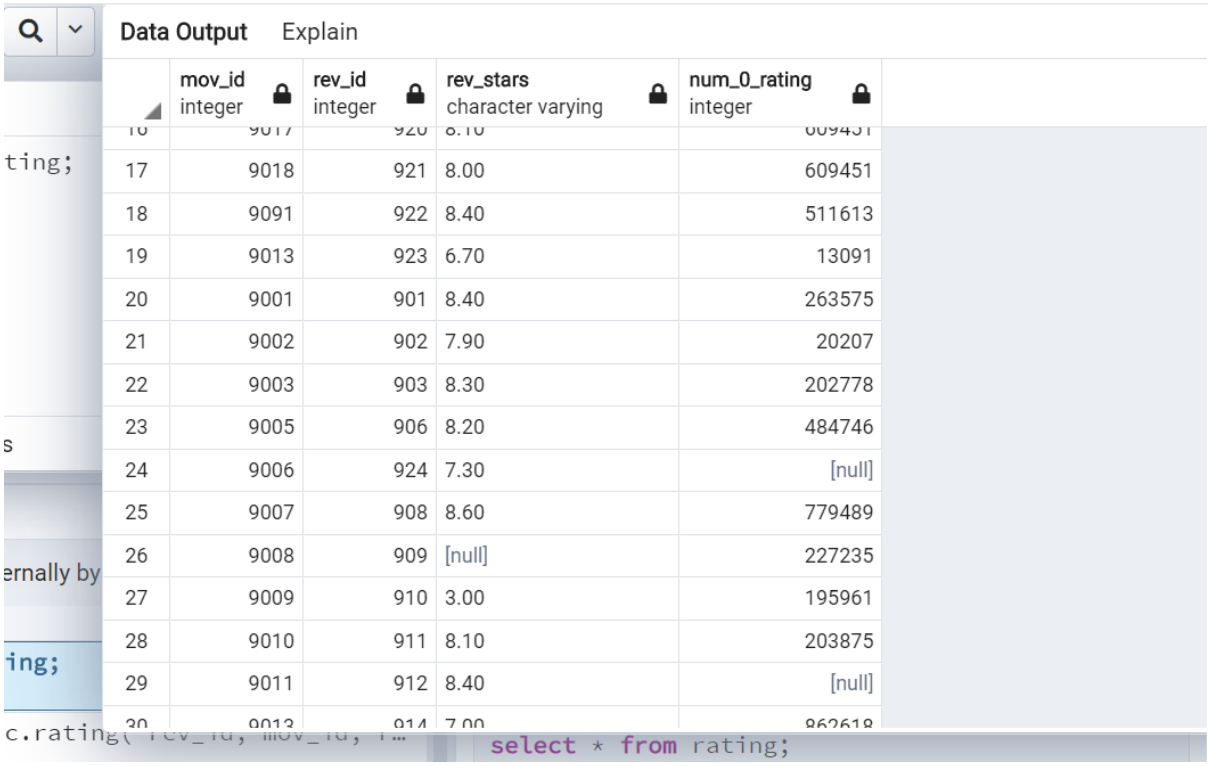
VALUES ('922', '9091', '8.40', '511613');

INSERT INTO public.rating(

rev_id, mov_id, rev_stars, num_0_rating)

VALUES ('923', '9013', '6.70', '13091');

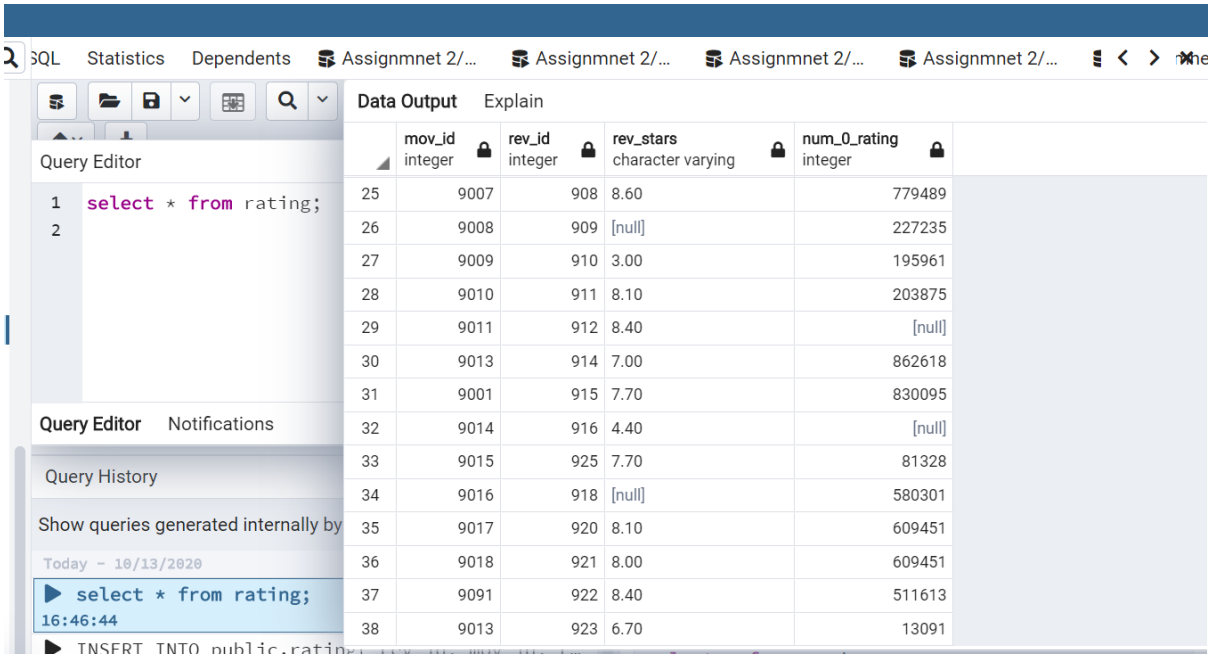




Data Output | Explain

	mov_id integer	rev_id integer	rev_stars character varying	num_0_rating integer
17	9018	921	8.00	609451
18	9091	922	8.40	511613
19	9013	923	6.70	13091
20	9001	901	8.40	263575
21	9002	902	7.90	20207
22	9003	903	8.30	202778
23	9005	906	8.20	484746
24	9006	924	7.30	[null]
25	9007	908	8.60	779489
26	9008	909	[null]	227235
27	9009	910	3.00	195961
28	9010	911	8.10	203875
29	9011	912	8.40	[null]

```
select * from rating;
```



SQL | Statistics | Dependents | Assignmnet 2/... | Assignmnet 2/... | Assignmnet 2/... | Assignmnet 2/...

Query Editor

```
1  select * from rating;
2
```

Query Editor | Notifications

Query History

Show queries generated internally by

Today - 10/13/2020

```
select * from rating;
16:46:44
```

Data Output | Explain

	mov_id integer	rev_id integer	rev_stars character varying	num_0_rating integer
25	9007	908	8.60	779489
26	9008	909	[null]	227235
27	9009	910	3.00	195961
28	9010	911	8.10	203875
29	9011	912	8.40	[null]
30	9013	914	7.00	862618
31	9001	915	7.70	830095
32	9014	916	4.40	[null]
33	9015	925	7.70	81328
34	9016	918	[null]	580301
35	9017	920	8.10	609451
36	9018	921	8.00	609451
37	9091	922	8.40	511613
38	9013	923	6.70	13091

Q.3

Query Editor

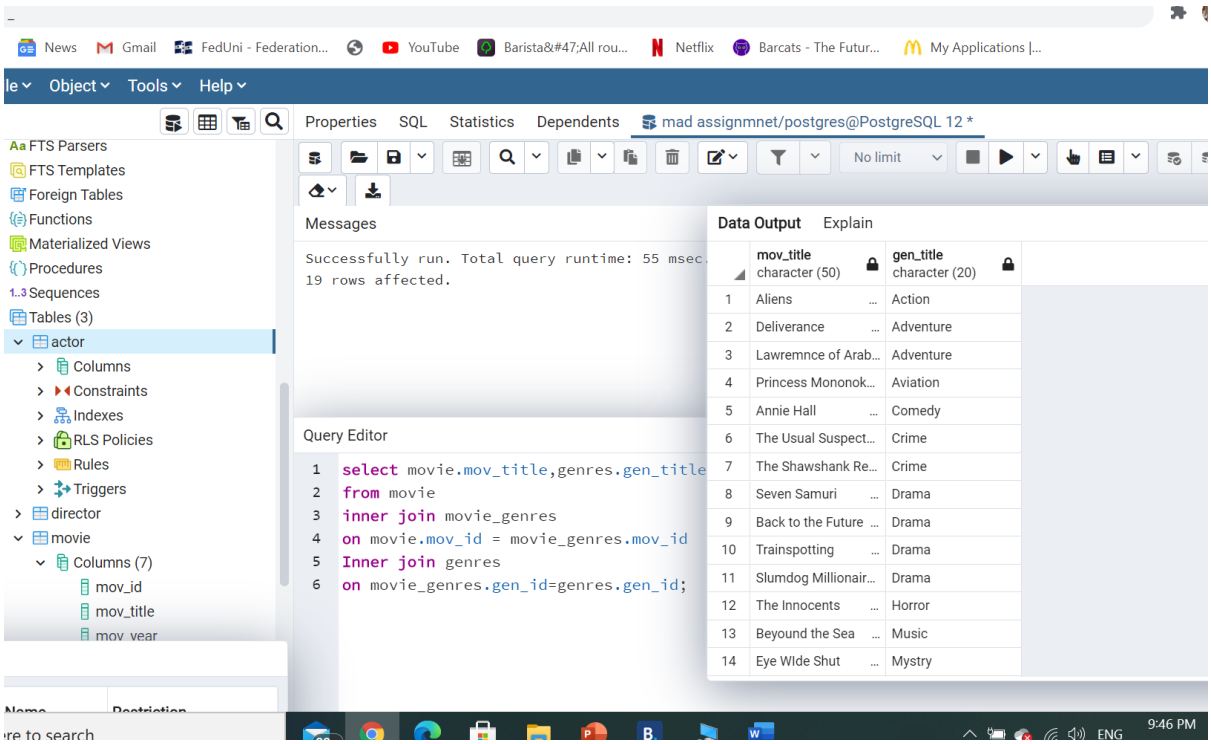
```
1  select mov_title, mov_year
2  from movie
3  where mov_title like '%the%'
```

Query Editor Notifications

Data Output Explain

	mov_title character varying	mov_year integer
1	Beyound the Sea	2004
2	Back to the Future	185

Q.No 4

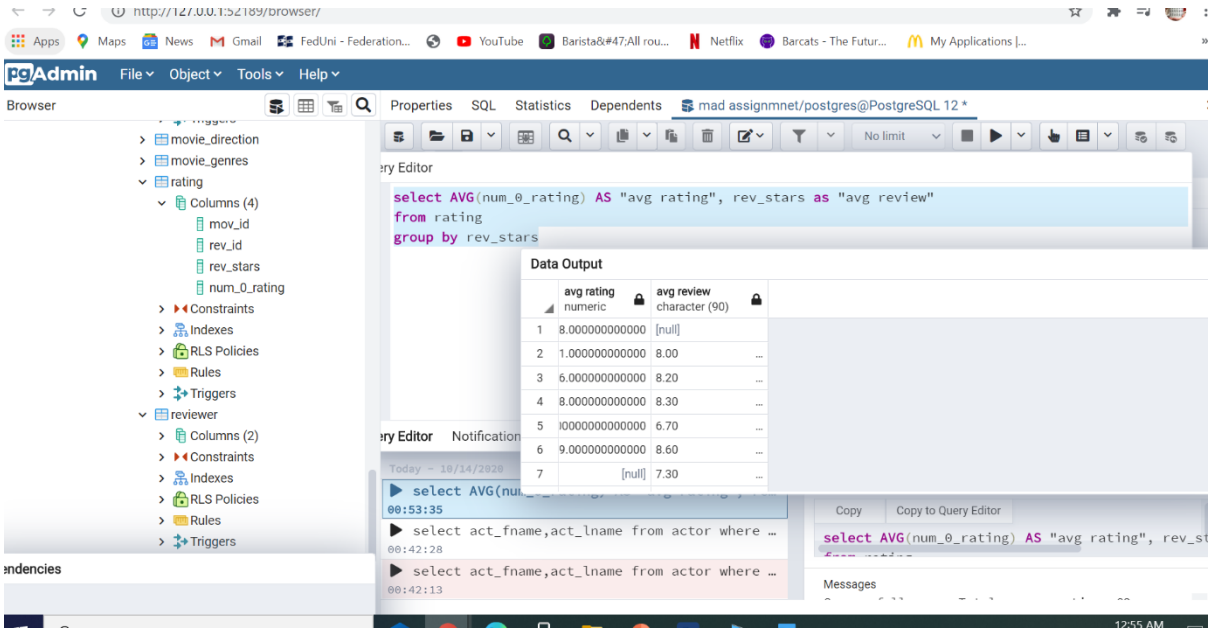


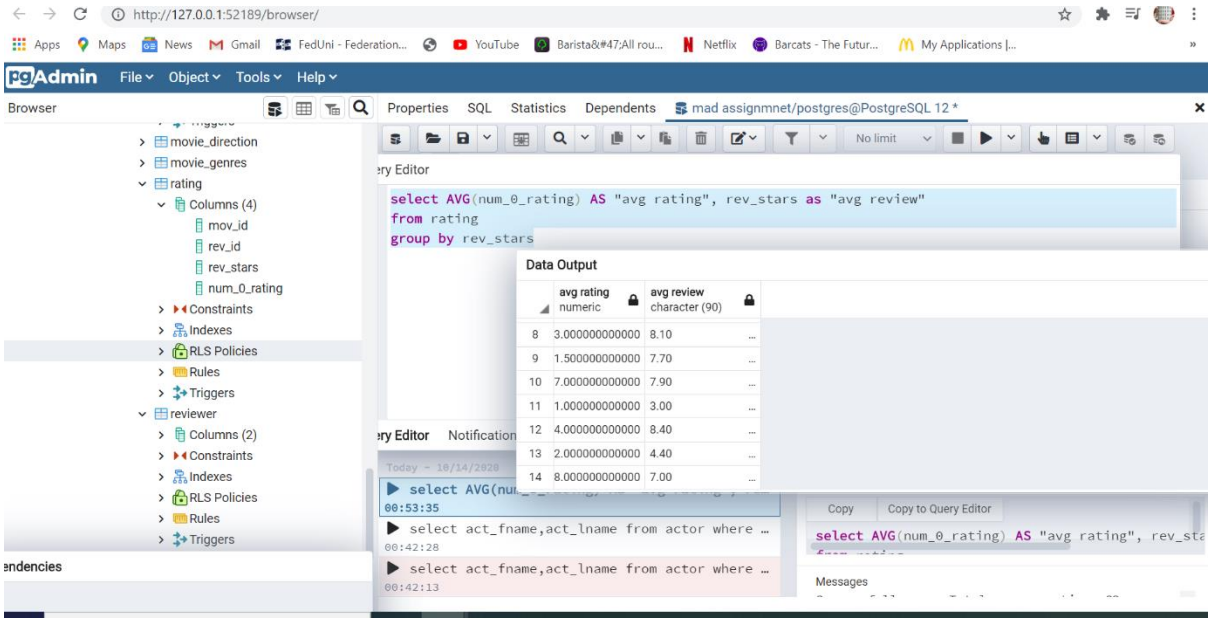
Q.NO 5

select AVG(num_0_rating) AS "avg rating", rev_stars as "avg review"

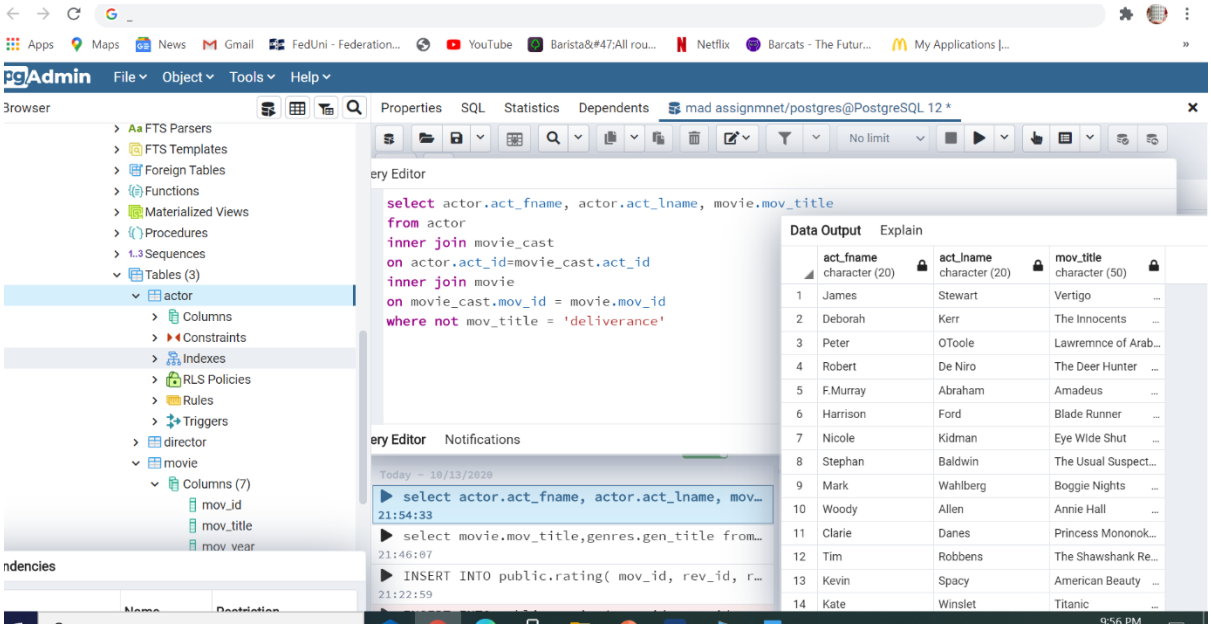
from rating

group by rev_stars




http://127.0.0.1:52189/browser/
pgAdmin
File
Object
Tools
Help
Browser
Properties
SQL
Statistics
Dependents
mad assignmnet/postgres@PostgreSQL 12 *
movie_direction
movie_genres
rating
Columns (4)
mov_id
rev_id
rev_stars
num_0_rating
Constraints
Indexes
RLS Policies
Rules
Triggers
reviewer
Columns (2)
Constraints
Indexes
RLS Policies
Rules
Triggers
select AVG(num_0_rating) AS "avg rating", rev_stars as "avg review"
from rating
group by rev_stars
Data Output
avg rating
numeric
avg review
character (90)
8 3.000000000000 8.10
9 1.500000000000 7.70
10 7.000000000000 7.90
11 1.000000000000 3.00
12 4.000000000000 8.40
13 2.000000000000 4.40
14 8.000000000000 7.00
Notifications
select act_fname,act_lname from actor where ...
00:42:28
select act_fname,act_lname from actor where ...
00:42:13
Copy
Copy to Query Editor
Messages

Q.NO 6


pgAdmin
File
Object
Tools
Help
Browser
Properties
SQL
Statistics
Dependents
mad assignmnet/postgres@PostgreSQL 12 *
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Procedures
Sequences
Tables (3)
actor
Columns
Constraints
Indexes
RLS Policies
Rules
Triggers
director
movie
Columns (7)
mov_id
mov_title
mov_year
select actor.act_fname, actor.act_lname, movie.mov_title
from actor
inner join movie_cast
on actor.act_id=movie_cast.act_id
inner join movie
on movie_cast.mov_id = movie.mov_id
where not mov_title = 'deliverance'
Data Output
Explain
act_fname
character (20)
act_lname
character (20)
mov_title
character (50)
1 James Stewart Vertigo
2 Deborah Kerr The Innocents
3 Peter OToole Lawremnce of Arab...
4 Robert De Niro The Deer Hunter
5 F.Murray Abraham Amadeus
6 Harrison Ford Blade Runner
7 Nicole Kidman Eye Wide Shut
8 Stephan Baldwin The Usual Suspect...
9 Mark Wahlberg Boggie Nights
10 Woody Allen Annie Hall
11 Clarie Danes Princess Mononok...
12 Tim Robbens The Shawshank Re...
13 Kevin Spacy American Beauty
14 Kate Winslet Titanic
Notifications
select actor.act_fname, actor.act_lname, mov...
21:54:33
select movie.mov_title,genres.gen_title from...
21:46:07
INSERT INTO public.rating(mov_id, rev_id, r...
21:22:59

Q.No 7

SELECT mov_title

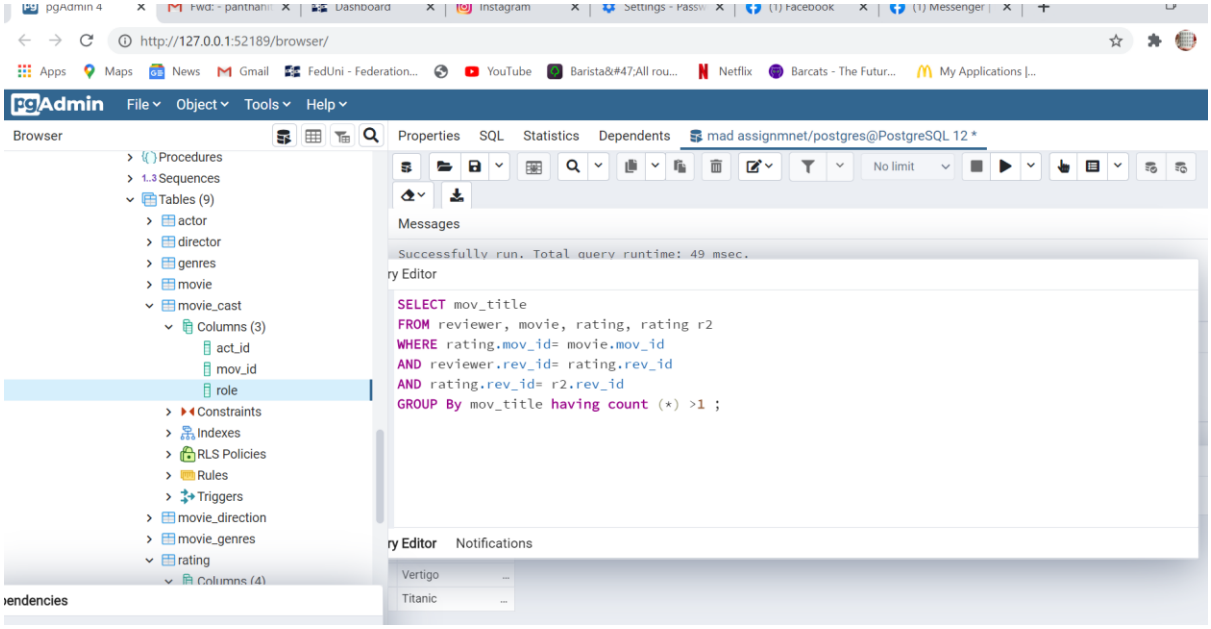
FROM reviewer, movie, rating, rating r2

WHERE rating.mov_id= movie.mov_id

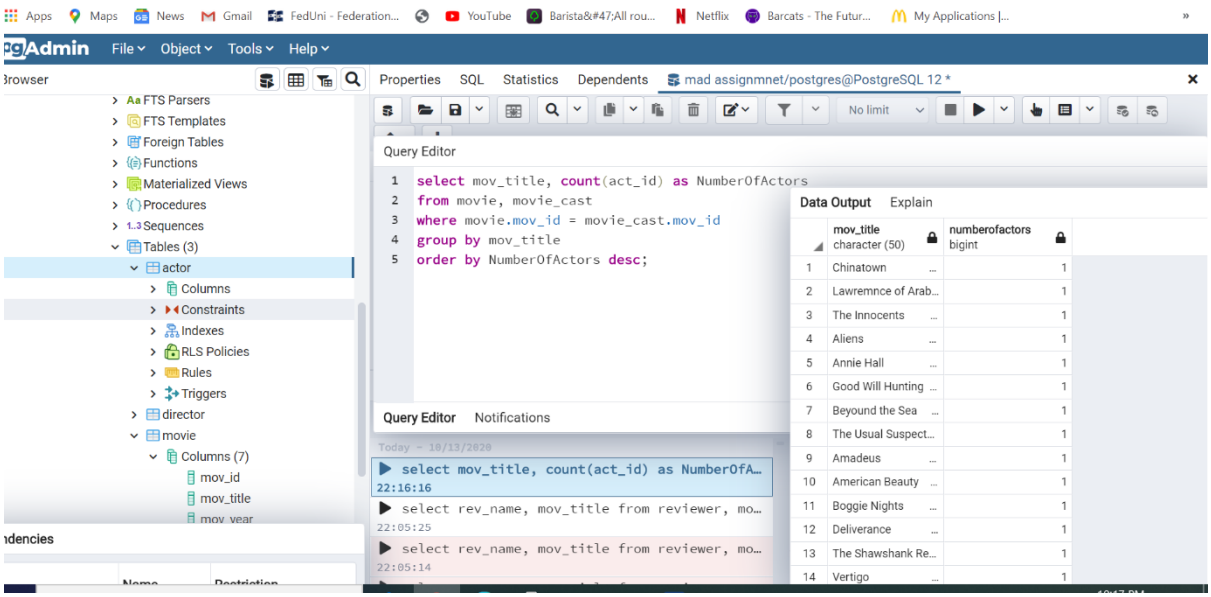
AND reviewer.rev_id= rating.rev_id

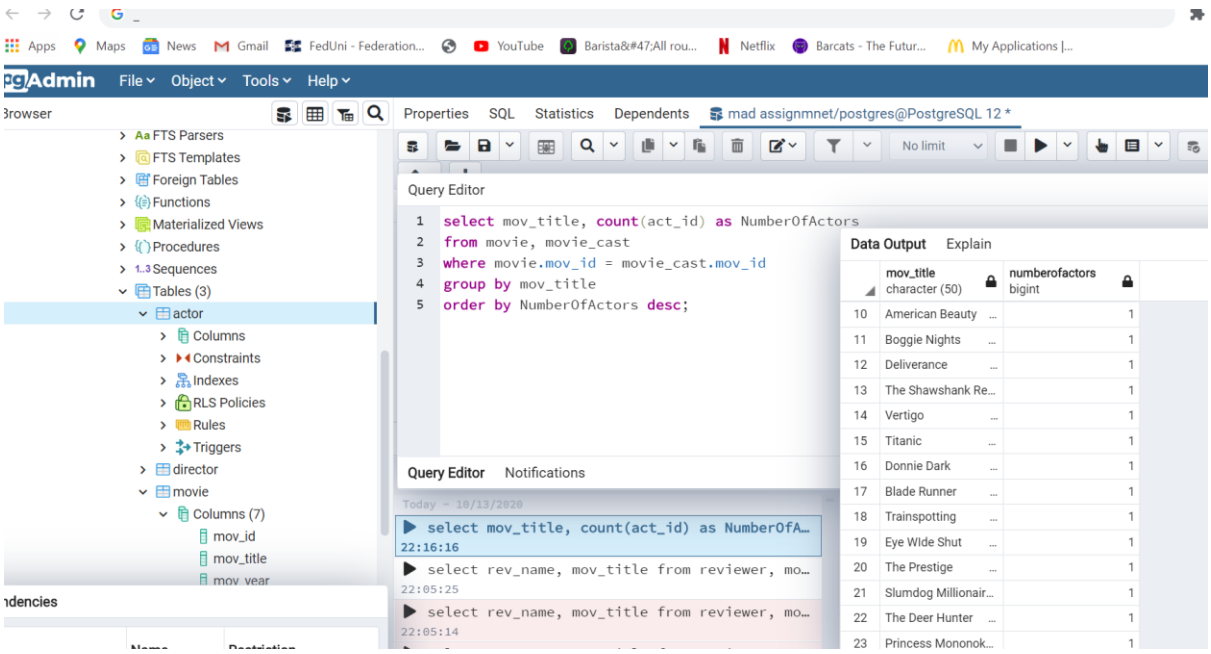
AND rating.rev_id= r2.rev_id

GROUP By mov_title having count (*) >1 ;



Q.no 8





Q,n0 9

select mov_title, rev_stars, act_fname, act_lname

from movie m, rating r, movie_cast mc, actor a

where m.mov_id = r.mov_id

and m.mov_id = mc.mov_id

and mc.act_id = a.act_id

and rev_stars > 8 and act_fname = 'Christian'

Q.10

I alter the table to add the new column dob and then insert the file using update command

alter table director

add column dob date;

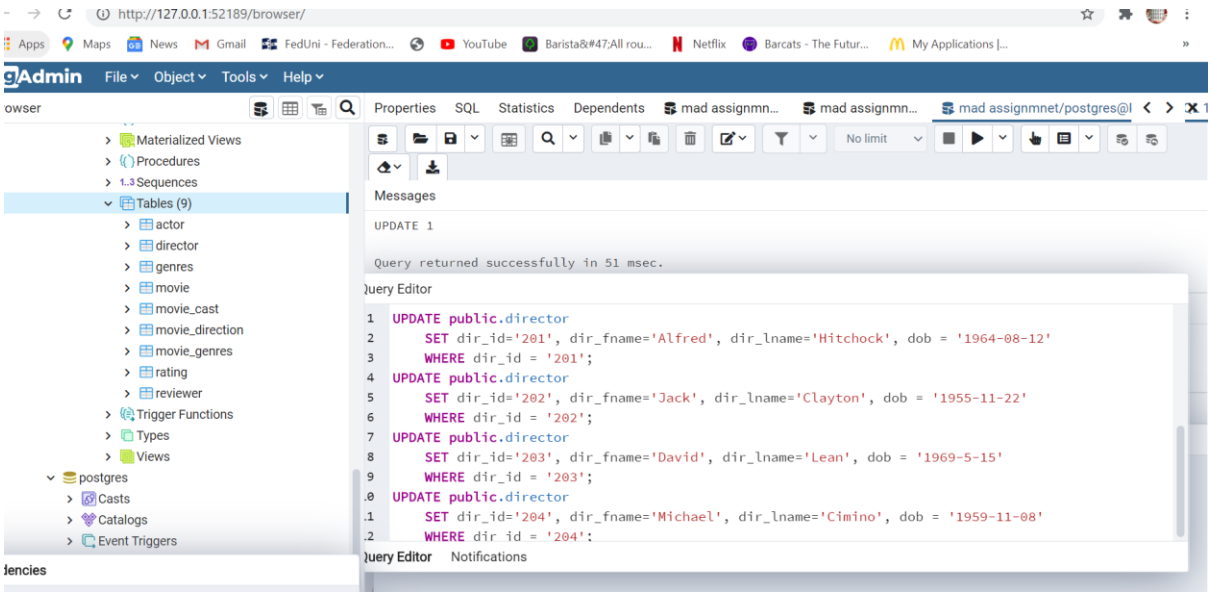
UPDATE public.director

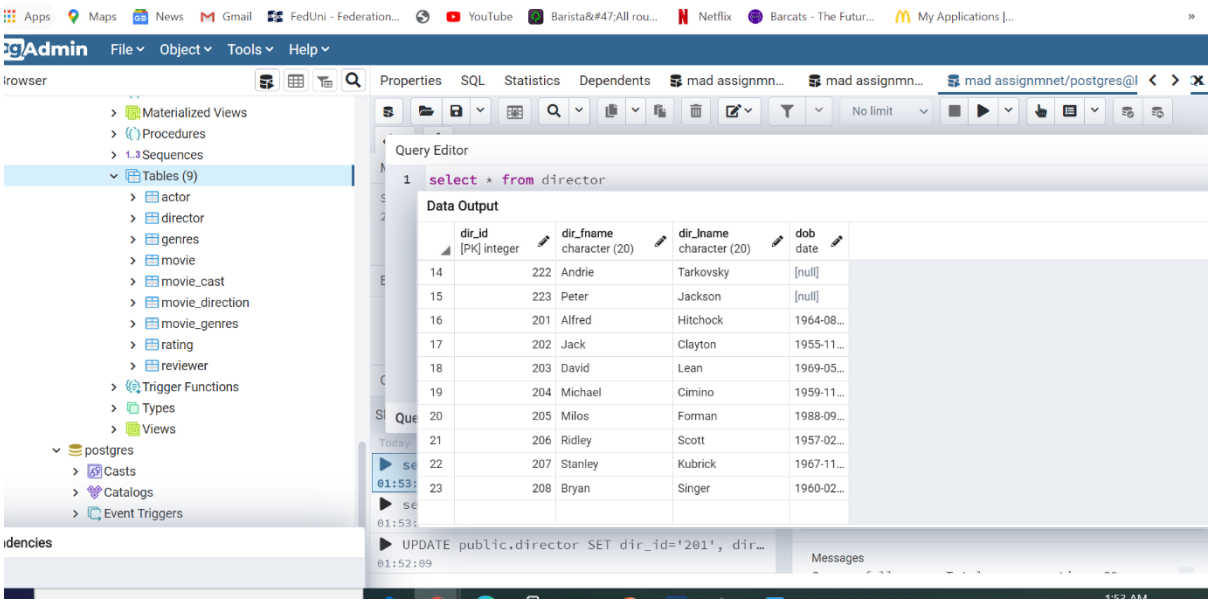
SET dir_id='201', dir_fname='Alfred', dir_lname='Hitchock', dob = '1964-08-12'

WHERE dir_id = '201';

UPDATE public.director

```
    SET dir_id='202', dir_fname='Jack', dir_lname='Clayton', dob = '1955-11-22'
    WHERE dir_id = '202';
UPDATE public.director
    SET dir_id='203', dir_fname='David', dir_lname='Lean', dob = '1969-5-15'
    WHERE dir_id = '203';
UPDATE public.director
    SET dir_id='204', dir_fname='Michael', dir_lname='Cimino', dob = '1959-11-08'
    WHERE dir_id = '204';
UPDATE public.director
    SET dir_id='205', dir_fname='Milos', dir_lname='Forman', dob = '1988-09-12'
    WHERE dir_id = '205';
UPDATE public.director
    SET dir_id='206', dir_fname='Ridley', dir_lname='Scott', dob = '1957-02-07'
    WHERE dir_id = '206';
UPDATE public.director
    SET dir_id='207', dir_fname='Stanley', dir_lname='Kubrick', dob = '1967-11-08'
    WHERE dir_id = '207';
UPDATE public.director
    SET dir_id='208', dir_fname='Bryan', dir_lname='Singer', dob = '1960-02-28'
    WHERE dir_id = '208';
```





q.no 11

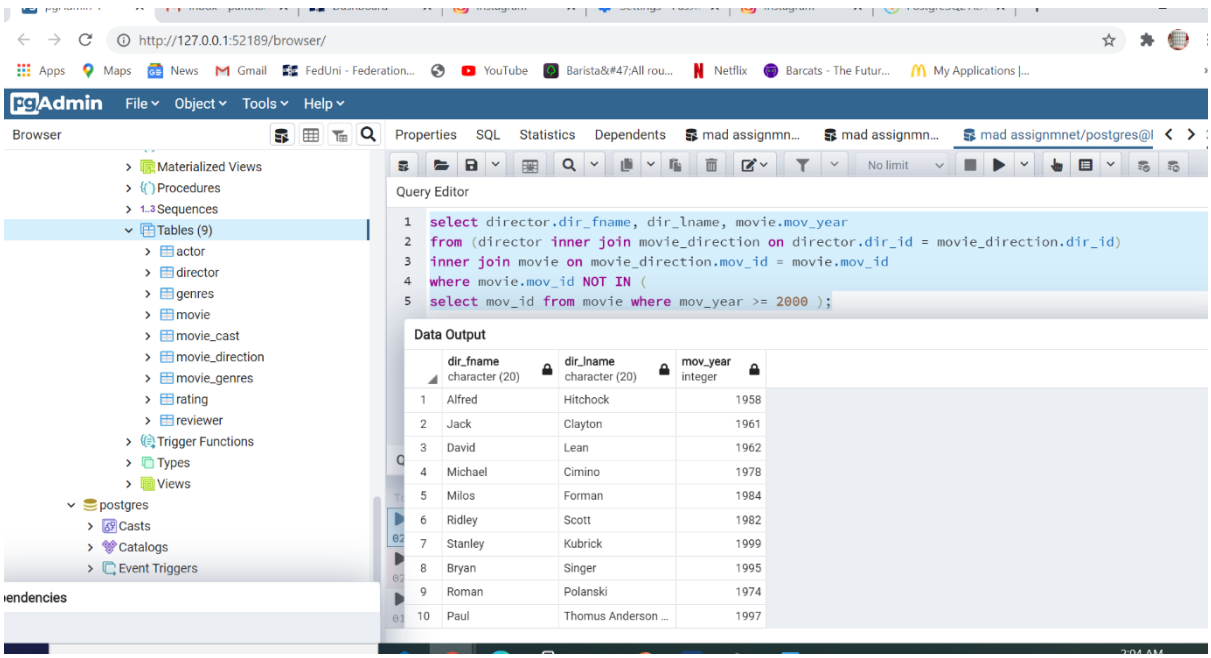
select director.dir_fname, dir_lname, movie.mov_year

from (director inner join movie_direction on director.dir_id = movie_direction.dir_id)

inner join movie on movie_direction.mov_id = movie.mov_id

where movie.mov_id NOT IN (

select mov_id from movie where mov_year >= 2000);



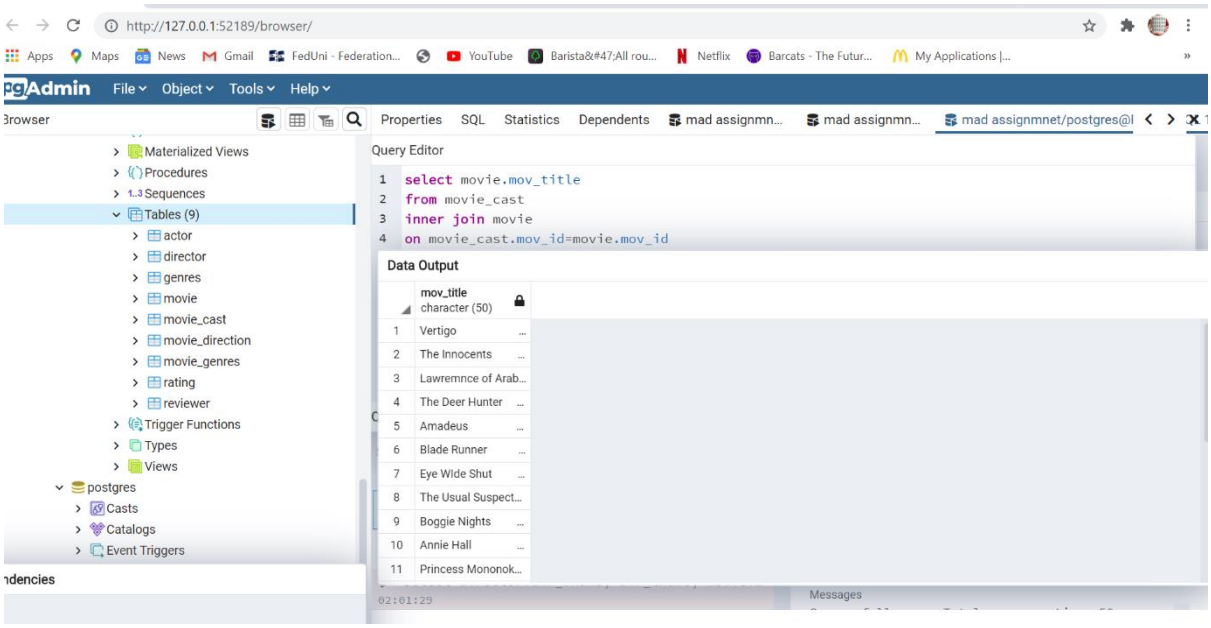
Q.No 12

select movie.mov_title

from movie_cast

inner join movie

on movie_cast.mov_id=movie.mov_id



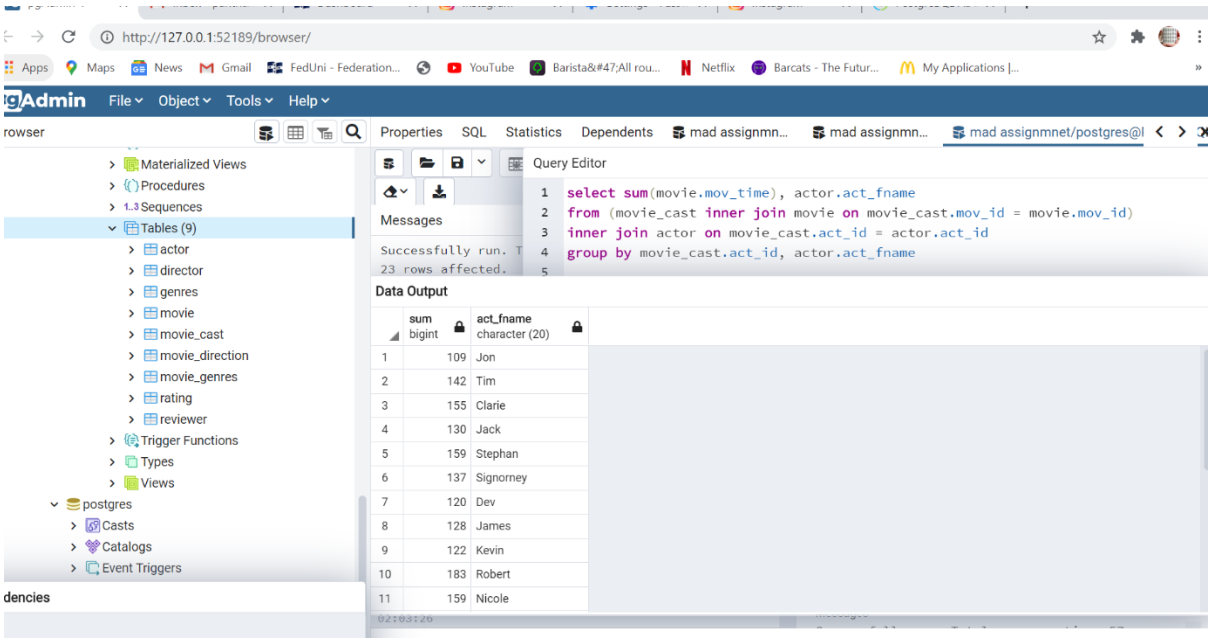
Q.no 13

select sum(movie.mov_time), actor.act_fname

from (movie_cast inner join movie on movie_cast.mov_id = movie.mov_id)

inner join actor on movie_cast.act_id = actor.act_id

group by movie_cast.act_id, actor.act_fname



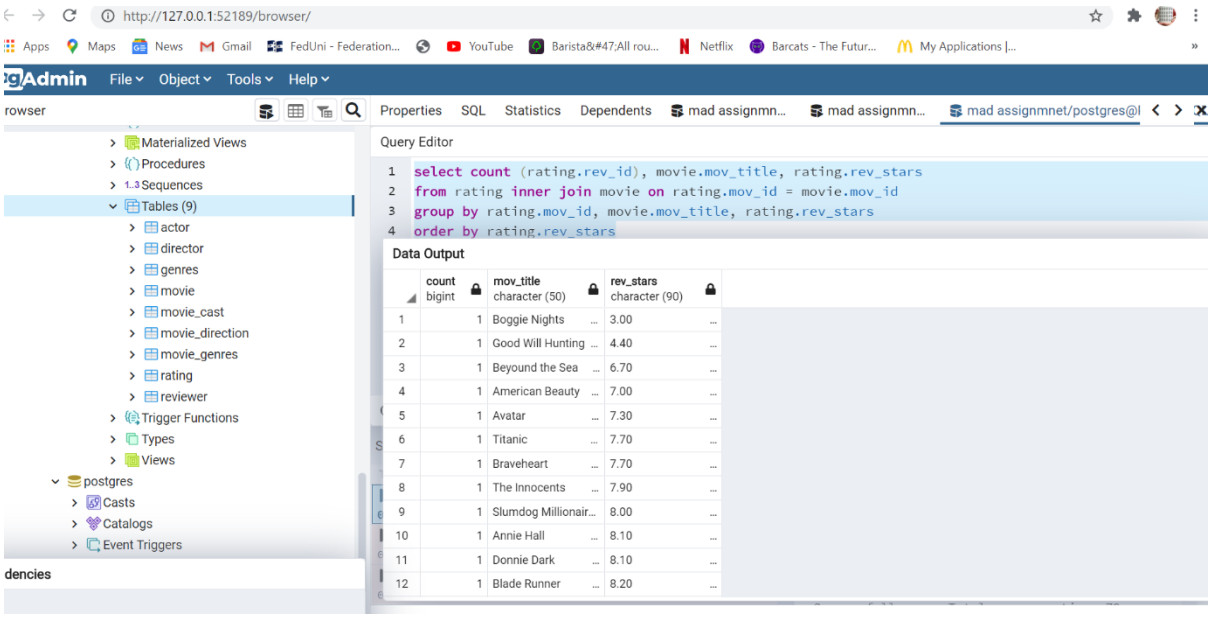
Q.no 14

select count (rating.rev_id), movie.mov_title, rating.rev_stars

from rating inner join movie on rating.mov_id = movie.mov_id

group by rating.mov_id, movie.mov_title, rating.rev_stars

order by rating.rev_stars



Q.no 15

select act_fname,act_lname from actor

where act_id IN(

select act_id from movie_cast

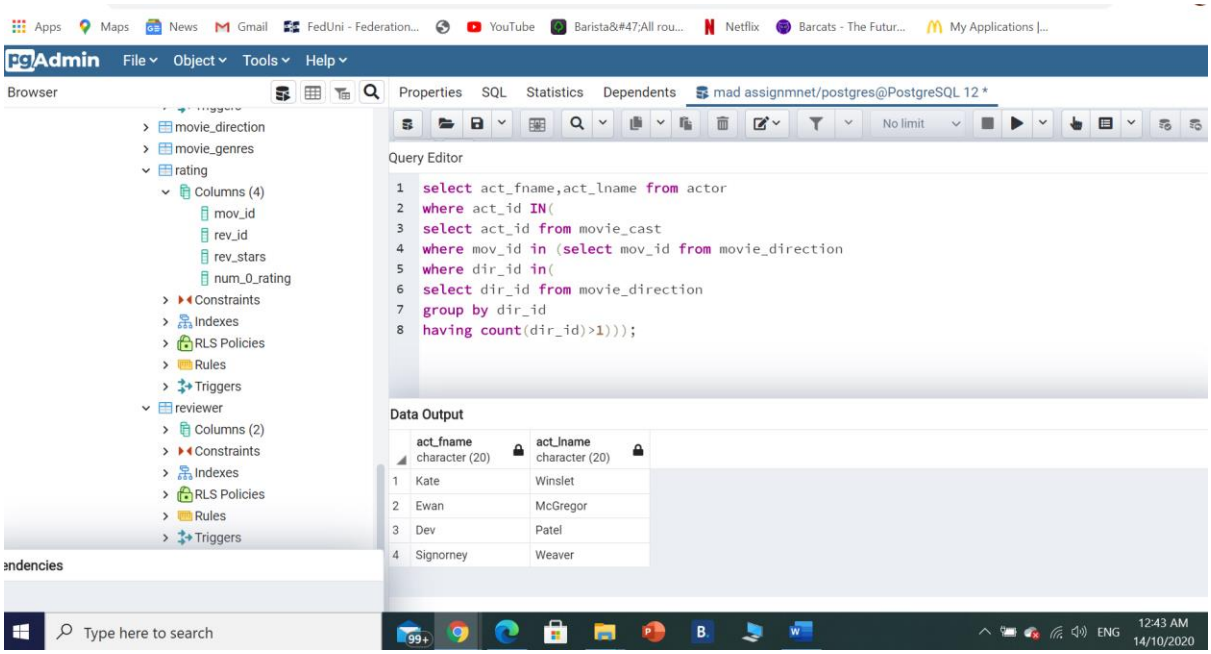
where mov_id in (select mov_id from movie_direction

where dir_id in(

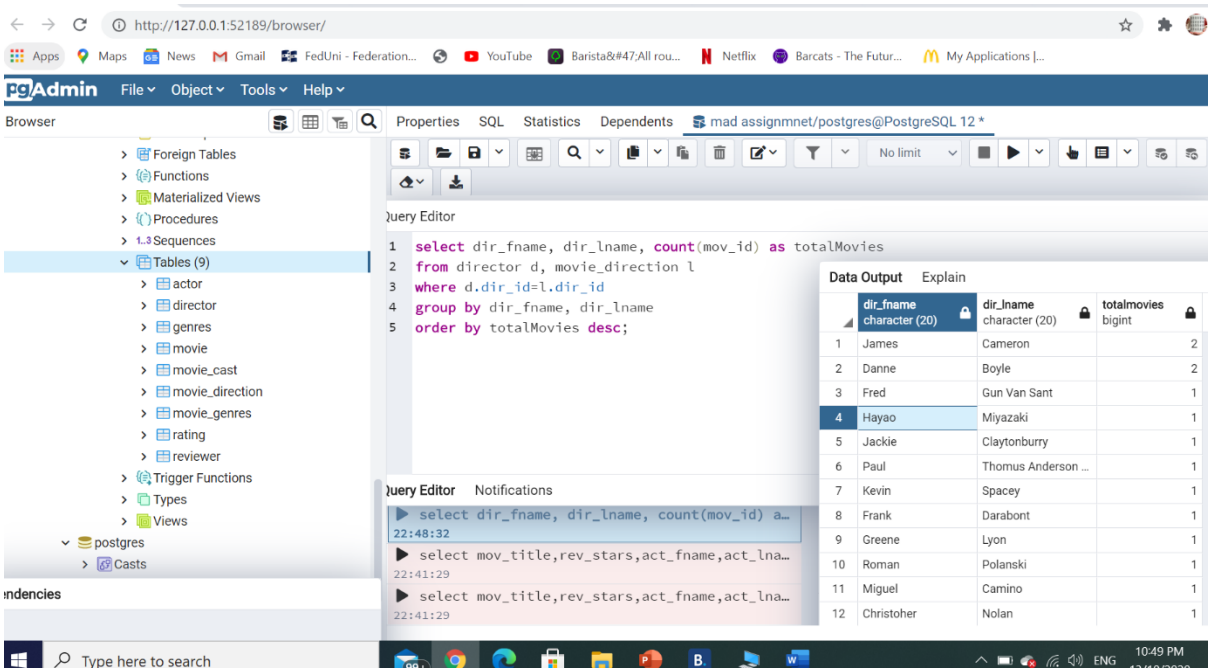
select dir_id from movie_direction

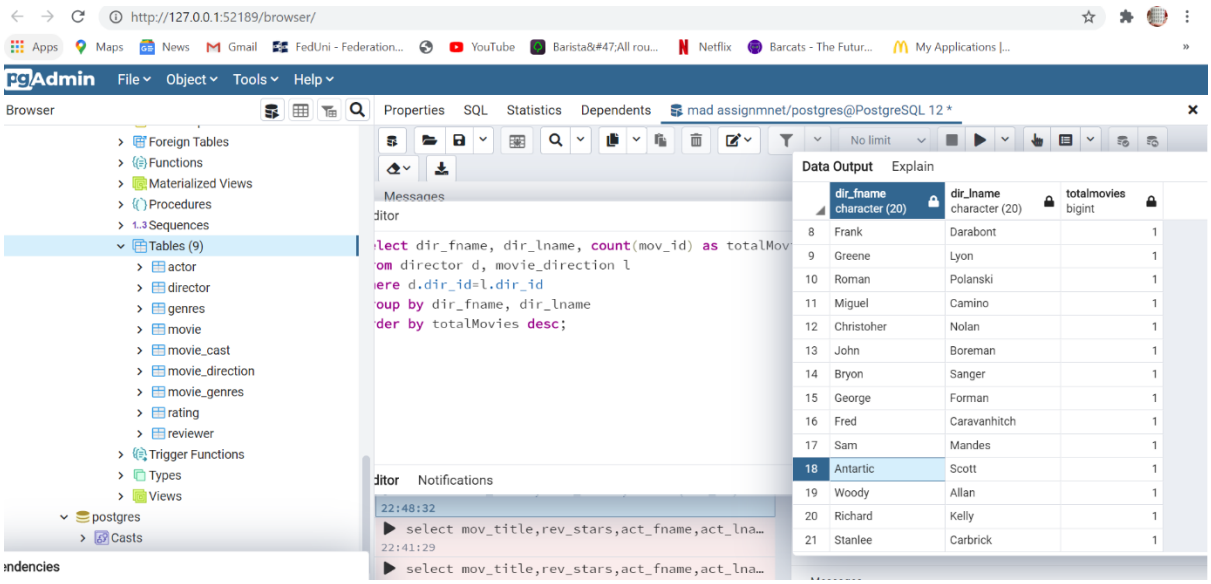
group by dir_id

having count(dir_id)>1)));



Q.No 16





Conclusion:

The assignment 2 has given me a tough time but taught me about the sql code which is most in data science and data modelling. Though the assignment was time consuming but the out put is always pleasure to watch. The use of pgadim in this assignment has given me overview of sql commands as well as importance of data entry. Along with it, it encourages me to explore internet resources.

References:

https://www.pgadmin.org

https://www.w3schools.com/