Answer 3.5- Filtering Data

1a. Film title contains the word Uptown in any position

Query   Query History

```
1   SELECT film_id, title, description
2   FROM film
3   WHERE title LIKE '%Uptown%'
```

Data output   Messages   Notifications

	film_id [PK] integer	title character varying (255)	description text
1	132	Chainsaw Uptown	A Beautiful ...
2	207	Dangerous Uptown	A Unbeliev...
3	927	Uprising Uptown	A Fanciful ...
4	928	Uptown Young	A Fateful D...

1b. Film length is more than 120 minutes and rental rate is more than 2.99

Query   Query History

```
1   SELECT film_id, title, description
2   FROM film
3   WHERE length > 120
4   AND rental_rate > 2.99
5
```

Data output   Messages   Notifications

	film_id [PK] integer	title character varying (255)	description text
1	13	Ali Forever	A Action-Packe
2	21	American Circus	A Insightful Dra

1c. Rental duration is between 3 and 7 days (where 3 and 7 aren't inclusive)

```
1  SELECT film_id, title, description,
2  rental_duration
3  FROM film
4  WHERE rental_duration BETWEEN 3 AND 7 AND NOT rental_duration= 3 AND
5  NOT rental_duration =7
```

Data output   Messages   Notifications

	title character varying (255)	description text
1	Grosse Wonderful	A Epic Drama of a Cat And a Explorer who must Redeem a Moose in Australia
2	Airport Pollock	A Epic Tale of a Moose And a Girl who must Confront a Monkey in Ancient India
3	Bright Encounters	A Fateful Yarn of a Lumberjack And a Feminist who must Conquer a Student in A Jet Boa
4	Academy Dinosaur	A Epic Drama of a Feminist And a Mad Scientist who must Battle a Teacher in The Cana
5	Affair Prejudice	A Fanciful Documentary of a Frisbee And a Lumberjack who must Chase a Monkey in A S
6	African Egg	A Fast-Paced Documentary of a Pastry Chef And a Dentist who must Pursue a Forensic
7	Airplane Sierra	A Touching Saga of a Hunter And a Butler who must Discover a Butler in A Jet Boat
8	Aladdin Calendar	A Action-Packed Tale of a Man And a Lumberjack who must Reach a Feminist in Ancient

1d. Film replacement cost is less than 14.99

```
1  SELECT film_id, title, description
2  FROM film
3  WHERE replacement_cost <14.99
```

Data output   Messages   Notifications

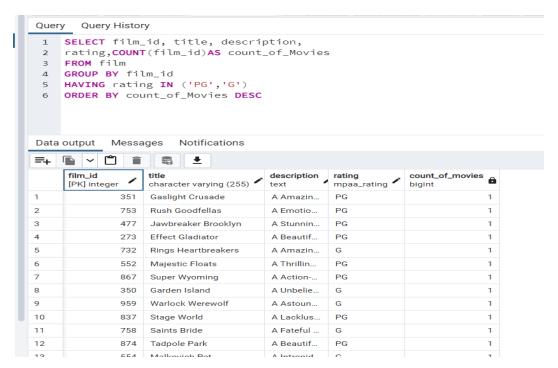|	film_id [PK] integer	title character varying (255)	description text
1	98	Bright Encounters	A Fateful Yarn of a Lun
2	2	Ace Goldfinger	A Astounding Epistle o
3	15	Alien Center	A Brilliant Drama of a C
4	22	Amistad Midsummer	A Emotional Character
5	23	Anaconda Confessions	A Lacklusture Display
6	27	Anonymous Human	A Amazing Reflection
7	29	Antitrust Tomatoes	A Fateful Yarn of a Wo
8	32	Apocalypse Flamingos	A Astounding Story of
9	36	Argonauts Town	A Emotional Epistle of
10	39	Armageddon Lost	A Fast-Paced Tale of a
11	42	Artist Coldblooded	A Stunning Reflection

1e. Film rating is either PG or G

```
1   SELECT film_id, title, description,
2   rating
3   FROM film
4   WHERE rating IN ('PG','G')
```

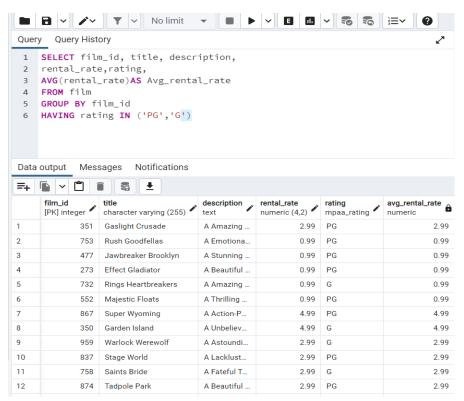Data output   Messages   Notifications

film_id [PK] integer	title character varying (255)	description text
1	Academy Dinosaur	A Epic Drama of a Feminist And a Mad Scientist who must Batt
2	Ace Goldfinger	A Astounding Epistle of a Database Administrator And a Explor
4	Affair Prejudice	A Fanciful Documentary of a Frisbee And a Lumberjack who m
5	African Egg	A Fast-Paced Documentary of a Pastry Chef And a Dentist who
6	Agent Truman	A Intrepid Panorama of a Robot And a Boy who must Escape a
11	Alamo Videotape	A Boring Epistle of a Butler And a Cat who must Fight a Pastry
12	Alaska Phantom	A Fanciful Saga of a Hunter And a Pastry Chef who must Vanqu

2a. Count of the movies

```
1   SELECT film_id, title, description,
2   rating,COUNT(film_id)AS count_of_Movies
3   FROM film
4   GROUP BY film_id
5   HAVING rating IN ('PG','G')
6   ORDER BY count_of_Movies DESC
```

Data output   Messages   Notifications

	film_id [PK] integer	title character varying (255)	description text	rating mpaa_rating	count_of_movies bigint
1	351	Gaslight Crusade	A Amazin...	PG	1
2	753	Rush Goodfellas	A Emotio...	PG	1
3	477	Jawbreaker Brooklyn	A Stunnin...	PG	1
4	273	Effect Gladiator	A Beautif...	PG	1
5	732	Rings Heartbreakers	A Amazin...	G	1
6	552	Majestic Floats	A Thrillin...	PG	1
7	867	Super Wyoming	A Action-...	PG	1
8	350	Garden Island	A Unbelie...	G	1
9	959	Warlock Werewolf	A Astoun...	G	1
10	837	Stage World	A Lacklus...	PG	1
11	758	Saints Bride	A Fateful ...	G	1
12	874	Tadpole Park	A Beautif...	PG	1
13	554	Malkovich Pet	A Intrepid	G	1

2b. Average rental rate.


```sql
1  SELECT film_id, title, description,
2  rental_rate,rating,
3  AVG(rental_rate)AS Avg_rental_rate
4  FROM film
5  GROUP BY film_id
6  HAVING rating IN ('PG','G')
```

	film_id [PK] integer	title character varying (255)	description text	rental_rate numeric (4,2)	rating mpaa_rating	avg_rental_rate numeric
1	351	Gaslight Crusade	A Amazing ...	2.99	PG	2.99
2	753	Rush Goodfellas	A Emotiona...	0.99	PG	0.99
3	477	Jawbreaker Brooklyn	A Stunning ...	0.99	PG	0.99
4	273	Effect Gladiator	A Beautiful ...	0.99	PG	0.99
5	732	Rings Heartbreakers	A Amazing ...	0.99	G	0.99
6	552	Majestic Floats	A Thrilling ...	0.99	PG	0.99
7	867	Super Wyoming	A Action-P...	4.99	PG	4.99
8	350	Garden Island	A Unbeliev...	4.99	G	4.99
9	959	Warlock Werewolf	A Astoundi...	2.99	G	2.99
10	837	Stage World	A Lacklust...	2.99	PG	2.99
11	758	Saints Bride	A Fateful T...	2.99	G	2.99
12	874	Tadpole Park	A Beautiful ...	2.99	PG	2.99

2c. Maximum rental duration and minimum rental duration


```sql
1  SELECT film_id, title, description,
2  rating,
3  MAX(rental_duration)AS Max_rental_duration,
4  MIN(rental_duration) AS Min_rental_duration
5  FROM film
6  GROUP BY film_id
7  HAVING rating IN ('PG','G')
```

	film_id [PK] integer	title character varying (255)	description text	rating mpaa_rating	max_rental_duration smallint	min_rental_duration smallint
1	351	Gaslight Crusade	A Amazing ...	PG	4	4
2	753	Rush Goodfellas	A Emotiona...	PG	3	3
3	477	Jawbreaker Brooklyn	A Stunning ...	PG	5	5
4	273	Effect Gladiator	A Beautiful ...	PG	6	6
5	732	Rings Heartbreakers	A Amazing ...	G	5	5
6	552	Majestic Floats	A Thrilling ...	PG	5	5
7	867	Super Wyoming	A Action-P...	PG	5	5
8	350	Garden Island	A Unbeliev...	G	3	3
9	959	Warlock Werewolf	A Astoundi...	G	6	6
10	837	Stage World	A Lacklust...	PG	4	4
11	758	Saints Bride	A Fateful T...	G	5	5
12	874	Tadpole Park	A Beautiful ...	PG	6	6
13	554	Malkovich Pet	A Intrepid R...	G	6	6

3 AND 4-

Aliases were already done in task 2 but below is 'group' by rating

Query   Query History   ↗   Scratch Pad

```sql
1  SELECT rating,
2  COUNT(title) AS Count_of_movies,
3  AVG(rental_rate)AS average_movie_rental_rate,
4  MAX(rental_duration)AS Maximum_rental_duration,
5  MIN(rental_duration) AS Minimum_rental_duration
6  FROM film
7  GROUP BY rating
8  HAVING rating IN ('PG','G')
```

Data output   Messages   Notifications

	rating mpaa_rating	count_of_movies bigint	average_movie_rental_rate numeric	maximum_rental_duration smallint	minimum_rental_duration smallint
1	G	178	2.888876404494382	7	3
2	PG	194	3.0518556701030928	7	3