3.5 **Answers**- Filtering Data

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

```
SELECT film_id, title, description
FROM film
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

```
SELECT film_id, title, description
FROM film
WHERE length >120 AND rental_rate>2.99
```

Query | Query History — Scratch Pad

```
WHERE length>120 AND rental_rate >2.99
```

Data output | Messages | Notifications

	film_id [PK] integer	title character varying (255)	description text
1	13	Ali Forever	A Action-Packed Drama of a Dentist And a Crocodile who must Battle a Feminist in The Canadian Rockies
2	21	American Circus	A Insightful Drama of a Girl And a Astronaut who must Face a Database Administrator in A Shark Tank
3	265	Dying Maker	A Intrepid Tale of a Boat And a Monkey who must Kill a Cat in California
4	47	Baby Hall	A Boring Character Study of a A Shark And a Girl who must Outrace a Feminist in An Abandoned Mine Shaft
5	126	Casualties Encino	A Insightful Yarn of a A Shark And a Pastry Chef who must Face a Boy in A Monastery
6	61	Beauty Grease	A Fast-Paced Display of a Composer And a Moose who must Sink a Robot in An Abandoned Mine Shaft
7	68	Betrayed Rear	A Emotional Character Study of a Boat And a Pioneer who must Find a Explorer in A Shark Tank
8	70	Bikini Borrowers	A Astounding Drama of a Astronaut And a Cat who must Discover a Woman in The First Manned Space St...
9	74	Birch Antitrust	A Fanciful Panorama of a Husband And a Pioneer who must Outgun a Dog in A Baloon
10	75	Bird Independence	A Thrilling Documentary of a Car And a Student who must Sink a Hunter in The Canadian Rockies
11	86	Boogie Amelie	A Lacklusture Character Study of a Husband And a Sumo Wrestler who must Succumb a Technical Writer ...
12	88	Born Spinal	A Touching Epistle of a Frisbee And a Husband who must Pursue a Student in Nigeria
13	93	Brannigan Sunrise	A Amazing Epistle of a Moose And a Crocodile who must Outrace a Dog in Berlin
14	95	Breakfast Goldfinger	A Beautiful Reflection of a Student And a Student who must Fight a Moose in Berlin
15	100	Brooklyn Desert	A Beautiful Drama of a Dentist And a Composer who must Battle a Sumo Wrestler in The First Manned Sp...
16	103	Bucket Brotherhood	A Amazing Display of a Girl And a Womanizer who must Succumb a Lumberjack in A Baloon Factory
17	117	Candles Grapes	A Fanciful Character Study of a Monkey And a Explorer who must Build a Astronaut in An Abandoned Fun ...
18	124	Casper Dragonfly	A Intrepid Documentary of a Boat And a Crocodile who must Chase a Robot in The Sahara Desert

1c. Rental duration is between 3 and 7 days (3 & 7 not inclusive)

```
SELECT film_id, title, description
FROM film
WHERE rental_duration > 3 AND rental_duration <7
```

Query | Query History — Scratch Pad

```
SELECT film_id, title, description
FROM film
WHERE rental_duration > 3 AND rental_duration <7
```

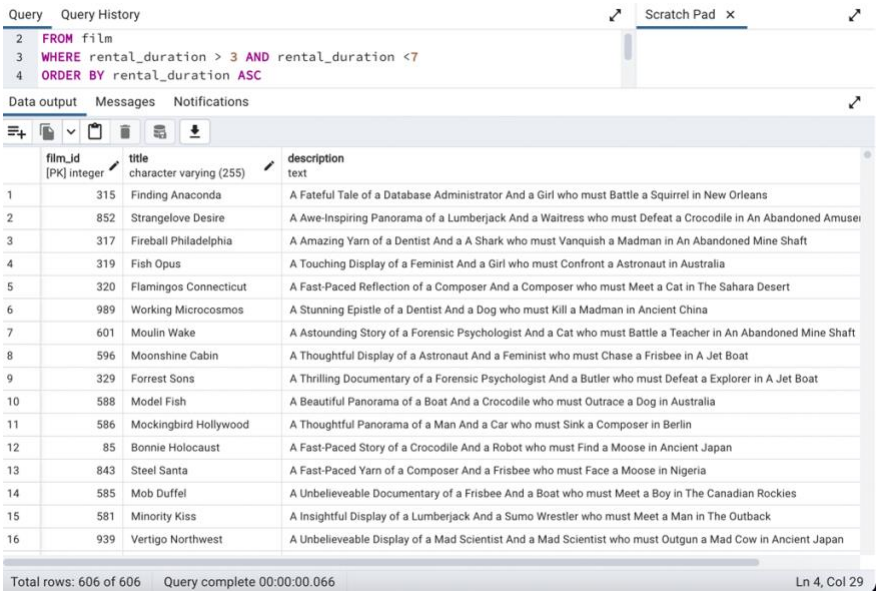
Data output | Messages | Notifications

	film_id [PK] integer	title character varying (255)	description text
1	384	Grosse Wonderful	A Epic Drama of a Cat And a Explorer who must Redeem a Moose in Australia
2	8	Airport Pollock	A Epic Tale of a Moose And a Girl who must Confront a Monkey in Ancient India
3	98	Bright Encounters	A Fateful Yarn of a Lumberjack And a Feminist who must Conquer a Student in A Jet Boat
4	1	Academy Dinosaur	A Epic Drama of a Feminist And a Mad Scientist who must Battle a Teacher in The Canadian Rockies
5	4	Affair Prejudice	A Fanciful Documentary of a Frisbee And a Lumberjack who must Chase a Monkey in A Shark Tank
6	5	African Egg	A Fast-Paced Documentary of a Pastry Chef And a Dentist who must Pursue a Forensic Psychologist in The Gulf of Me
7	7	Airplane Sierra	A Touching Saga of a Hunter And a Butler who must Discover a Butler in A Jet Boat
8	10	Aladdin Calendar	A Action-Packed Tale of a Man And a Lumberjack who must Reach a Feminist in Ancient China
9	11	Alamo Videotape	A Boring Epistle of a Butler And a Cat who must Fight a Pastry Chef in A MySQL Convention
10	12	Alaska Phantom	A Fanciful Saga of a Hunter And a Pastry Chef who must Vanquish a Boy in Australia
11	213	Date Speed	A Touching Saga of a Composer And a Moose who must Discover a Dentist in A MySQL Convention
12	13	Ali Forever	A Action-Packed Drama of a Dentist And a Crocodile who must Battle a Feminist in The Canadian Rockies
13	14	Alice Fantasia	A Emotional Drama of a A Shark And a Database Administrator who must Vanquish a Pioneer in Soviet Georgia
14	15	Alien Center	A Brilliant Drama of a Cat And a Mad Scientist who must Battle a Feminist in A MySQL Convention
15	16	Alley Evolution	A Fast-Paced Drama of a Robot And a Composer who must Battle a Astronaut in New Orleans
16	18	Alter Victory	A Thoughtful Drama of a Composer And a Feminist who must Meet a Secret Agent in The Canadian Rockies

Total rows: 606 of 606 | Query complete 00:00:00.133 | Ln 4, Col 1

In Ascending order

```
SELECT film_id, title, description
FROM film
WHERE rental_duration > 3 AND rental_duration <7
ORDER BY rental_duration ASC
```

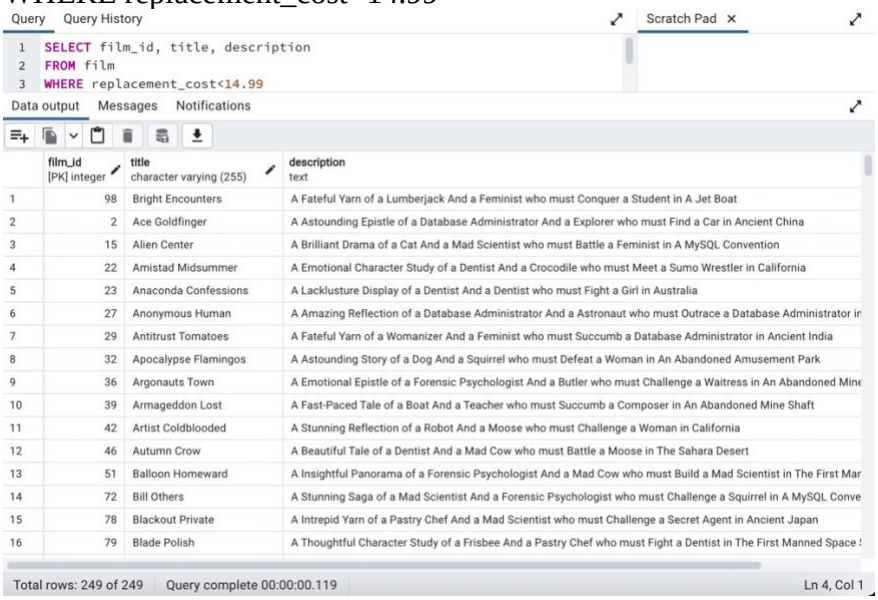


	film_id [PK] integer	title character varying (255)	description text
1	315	Finding Anaconda	A Fateful Tale of a Database Administrator And a Girl who must Battle a Squirrel in New Orleans
2	852	Strangelove Desire	A Awe-Inspiring Panorama of a Lumberjack And a Waitress who must Defeat a Crocodile in An Abandoned Amuse
3	317	Fireball Philadelphia	A Amazing Yarn of a Dentist And a A Shark who must Vanquish a Madman in An Abandoned Mine Shaft
4	319	Fish Opus	A Touching Display of a Feminist And a Girl who must Confront a Astronaut in Australia
5	320	Flamingos Connecticut	A Fast-Paced Reflection of a Composer And a Composer who must Meet a Cat in The Sahara Desert
6	989	Working Microcosmos	A Stunning Epistle of a Dentist And a Dog who must Kill a Madman in Ancient China
7	601	Moulin Wake	A Astounding Story of a Forensic Psychologist And a Cat who must Battle a Teacher in An Abandoned Mine Shaft
8	596	Moonshine Cabin	A Thoughtful Display of a Astronaut And a Feminist who must Chase a Frisbee in A Jet Boat
9	329	Forrest Sons	A Thrilling Documentary of a Forensic Psychologist And a Butler who must Defeat a Explorer in A Jet Boat
10	588	Model Fish	A Beautiful Panorama of a Boat And a Crocodile who must Outrace a Dog in Australia
11	586	Mockingbird Hollywood	A Thoughtful Panorama of a Man And a Car who must Sink a Composer in Berlin
12	85	Bonnie Holocaust	A Fast-Paced Story of a Crocodile And a Robot who must Find a Moose in Ancient Japan
13	843	Steel Santa	A Fast-Paced Yarn of a Composer And a Frisbee who must Face a Moose in Nigeria
14	585	Mob Duffel	A Unbelieveable Documentary of a Frisbee And a Boat who must Meet a Boy in The Canadian Rockies
15	581	Minority Kiss	A Insightful Display of a Lumberjack And a Sumo Wrestler who must Meet a Man in The Outback
16	939	Vertigo Northwest	A Unbelieveable Display of a Mad Scientist And a Mad Scientist who must Outgun a Mad Cow in Ancient Japan

Total rows: 606 of 606 Query complete 00:00:00.066 Ln 4, Col 29

1d. . Film replacement cost is less than 14.99

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

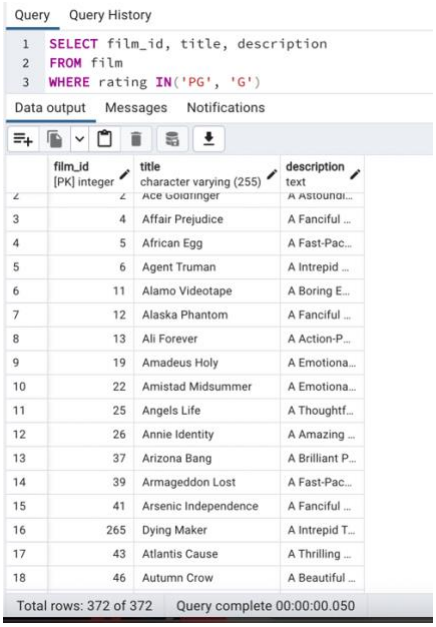


	film_id [PK] integer	title character varying (255)	description text
1	98	Bright Encounters	A Fateful Yarn of a Lumberjack And a Feminist who must Conquer a Student in A Jet Boat
2	2	Ace Goldfinger	A Astounding Epistle of a Database Administrator And a Explorer who must Find a Car in Ancient China
3	15	Alien Center	A Brilliant Drama of a Cat And a Mad Scientist who must Battle a Feminist in A MySQL Convention
4	22	Amistad Midsummer	A Emotional Character Study of a Dentist And a Crocodile who must Meet a Sumo Wrestler in California
5	23	Anaconda Confessions	A Lacklusture Display of a Dentist And a Dentist who must Fight a Girl in Australia
6	27	Anonymous Human	A Amazing Reflection of a Database Administrator And a Astronaut who must Outrace a Database Administrator in
7	29	Antitrust Tomatoes	A Fateful Yarn of a Womanizer And a Feminist who must Succumb a Database Administrator in Ancient India
8	32	Apocalypse Flamingos	A Astounding Story of a Dog And a Squirrel who must Defeat a Woman in An Abandoned Amusement Park
9	36	Argonauts Town	A Emotional Epistle of a Forensic Psychologist And a Butler who must Challenge a Waitress in An Abandoned Mine
10	39	Armageddon Lost	A Fast-Paced Tale of a Boat And a Teacher who must Succumb a Composer in An Abandoned Mine Shaft
11	42	Artist Coldblooded	A Stunning Reflection of a Robot And a Moose who must Challenge a Woman in California
12	46	Autumn Crow	A Beautiful Tale of a Dentist And a Mad Cow who must Battle a Moose in The Sahara Desert
13	51	Balloon Homeward	A Insightful Panorama of a Forensic Psychologist And a Mad Cow who must Build a Mad Scientist in The First Mar
14	72	Bill Others	A Stunning Saga of a Mad Scientist And a Forensic Psychologist who must Challenge a Squirrel in A MySQL Conve
15	78	Blackout Private	A Intrepid Yarn of a Pastry Chef And a Mad Scientist who must Challenge a Secret Agent in Ancient Japan
16	79	Blade Polish	A Thoughtful Character Study of a Frisbee And a Pastry Chef who must Fight a Dentist in The First Manned Space

Total rows: 249 of 249 Query complete 00:00:00.119 Ln 4, Col 1

1e . Film rating with either “PG” or “G”

```
SELECT film_id, title, description
FROM film
WHERE rating IN (‘PG’, ‘G’)
```



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

Data output | Messages | Notifications

	film_id [PK] integer	title character varying (255)	description text
2	2	Ace Goldfinger	A Astoundi...
3	4	Affair Prejudice	A Fanciful ...
4	5	African Egg	A Fast-Pac...
5	6	Agent Truman	A Intrepid ...
6	11	Alamo Videotape	A Boring E...
7	12	Alaska Phantom	A Fanciful ...
8	13	Ali Forever	A Action-P...
9	19	Amadeus Holy	A Emotiona...
10	22	Amistad Midsummer	A Emotiona...
11	25	Angels Life	A Thoughtf...
12	26	Annie Identity	A Amazing ...
13	37	Arizona Bang	A Brilliant P...
14	39	Armageddon Lost	A Fast-Pac...
15	41	Arsenic Independence	A Fanciful ...
16	265	Dying Maker	A Intrepid T...
17	43	Atlantis Cause	A Thrilling ...
18	46	Autumn Crow	A Beautiful ...

Total rows: 372 of 372 | Query complete 00:00:00.050

2a. Count of movies with PG or G ratings – 372
2b. Average rental rate – PG (3.05) G(2.88)
2c. Max. rental duration and min rental duration – 3 and 7 days

```
Query  Query History
1 SELECT rating,
2 COUNT(title),
3 AVG(rental_rate),
4 MAX(rental_duration),
5 MIN(rental_duration)
6 FROM film
7 WHERE rating IN ('PG', 'G') GROUP BY rating
8
```

Data output | Messages | Notifications

	rating mpaa_rating	count bigint	avg numeric	max smallint	min smallint
1	G	178	2.888876404	7	3
2	PG	194	3.051855670	7	3

3. To make the output easier for your coworkers to understand, give your aggregate columns the following aliases: “count of movies,” “average movie rental rate,” “maximum rental duration”, and “minimum rental duration”

SELECT rating,
COUNT(title),
AVG(rental_rate),
MAX(rental_duration),
MIN(rental_duration)
FROM film
WHERE rating IN ('PG', 'G') GROUP BY rating

Query Query History

```
SELECT rating,
COUNT(title),
AVG(rental_rate),
MAX(rental_duration),
MIN(rental_duration)
FROM film
WHERE rating IN ('PG', 'G') GROUP BY rating

```

Data output Messages Notifications

	rating mpaa_rating	count bigint	avg numeric	max smallint	min smallint
1	G	178	2.888876404	7	3
2	PG	194	3.051855670	7	3

4. The customer team would like to see the fields you calculated in step 3 grouped by rating.

Query Query History Scratch Pad ×

```
SELECT rating,
COUNT(title) AS count_of_movies,
AVG(rental_rate) AS Average_movie_rental_rate,
MAX(rental_duration)AS maximum_rental_duration,
MIN(rental_duration) AS minimum_rental_duration
FROM film
WHERE rating IN ('PG', 'G') GROUP BY rating

```

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