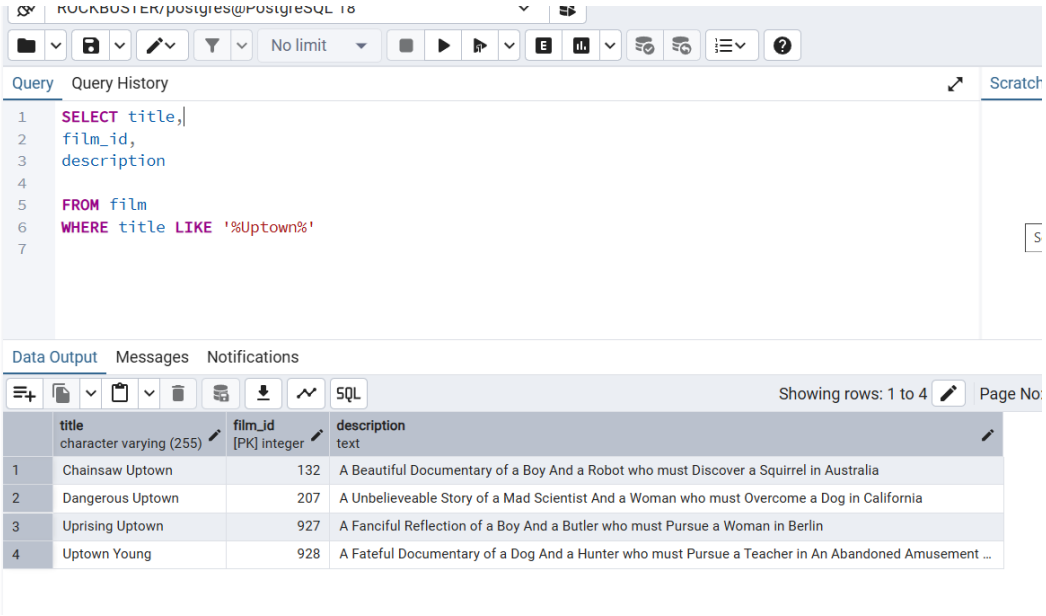
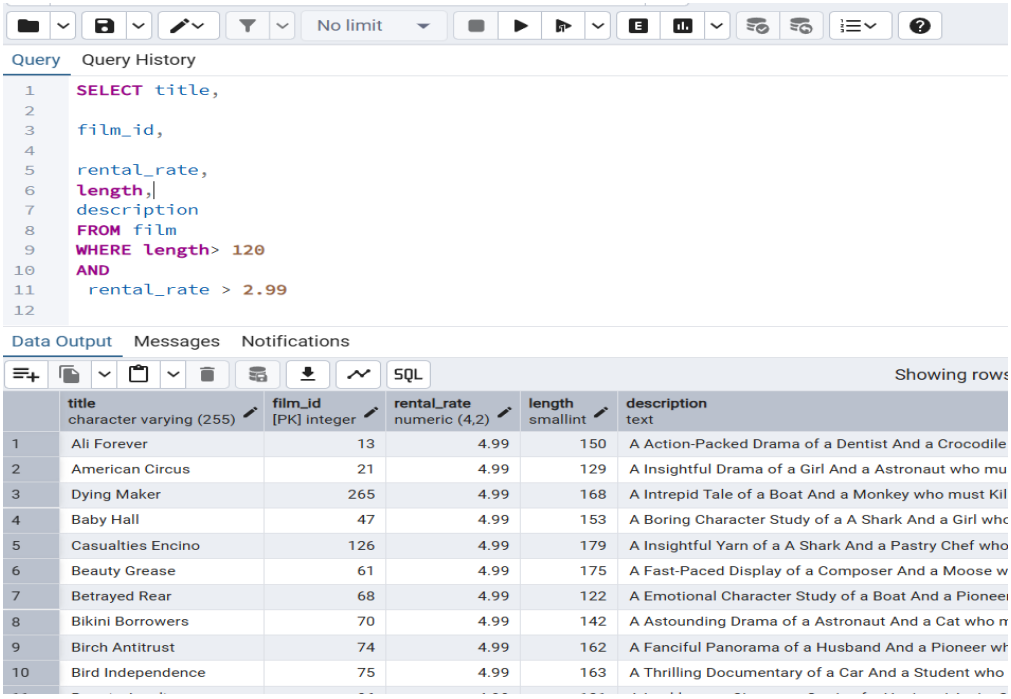
Databases & SQL for Analysts

3.5: Filtering Data

Film title contains the word *Uptown* in any position



Film length is more than 120 minutes and rental rate is more than 2.99

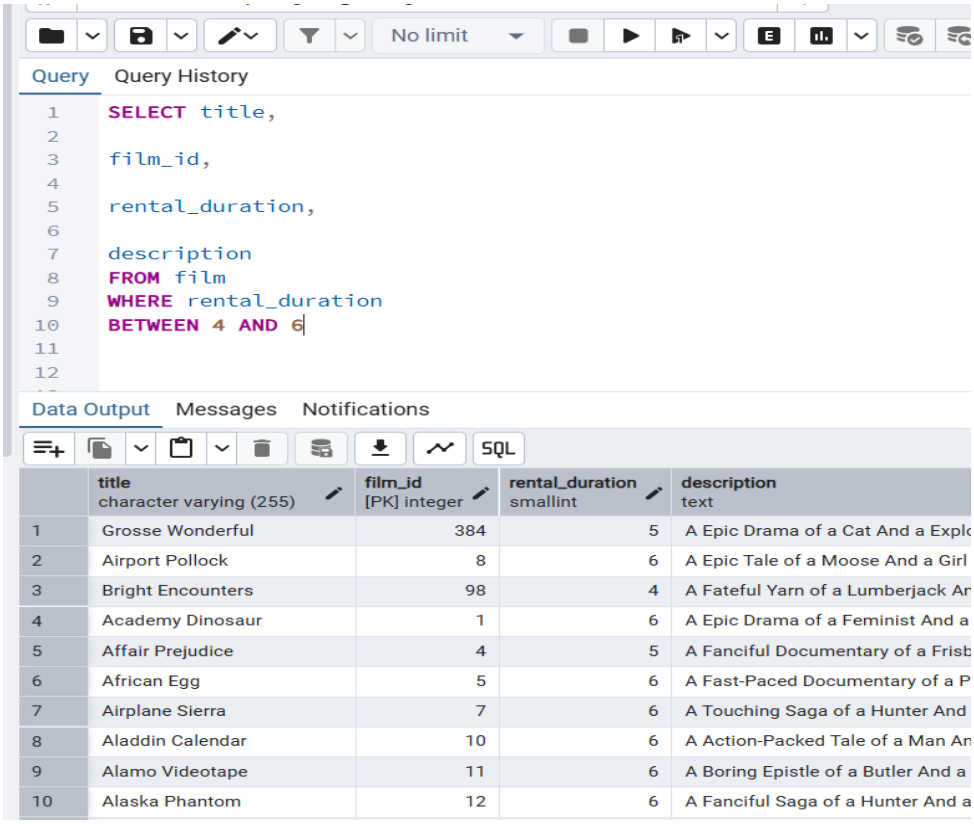


```
SELECT title,

film_id,

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

Data Output | Messages | Notifications

	title character varying (255)	film_id [PK] integer	rental_rate numeric (4,2)	length smallint	description text
1	Ali Forever	13	4.99	150	A Action-Packed Drama of a Dentist And a Crocodile
2	American Circus	21	4.99	129	A Insightful Drama of a Girl And a Astronaut who mu
3	Dying Maker	265	4.99	168	A Intrepid Tale of a Boat And a Monkey who must Kil
4	Baby Hall	47	4.99	153	A Boring Character Study of a A Shark And a Girl who
5	Casualties Encino	126	4.99	179	A Insightful Yarn of a A Shark And a Pastry Chef who
6	Beauty Grease	61	4.99	175	A Fast-Paced Display of a Composer And a Moose w
7	Betrayed Rear	68	4.99	122	A Emotional Character Study of a Boat And a Pioneer
8	Bikini Borrowers	70	4.99	142	A Astounding Drama of a Astronaut And a Cat who m
9	Birch Antitrust	74	4.99	162	A Fanciful Panorama of a Husband And a Pioneer wh
10	Bird Independence	75	4.99	163	A Thrilling Documentary of a Car And a Student who

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



```
SELECT title,

film_id,

rental_duration,

description
FROM film
WHERE rental_duration
BETWEEN 4 AND 6
```

Data Output | Messages | Notifications

	title character varying (255)	film_id [PK] integer	rental_duration smallint	description text
1	Grosse Wonderful	384	5	A Epic Drama of a Cat And a Explo
2	Airport Pollock	8	6	A Epic Tale of a Moose And a Girl
3	Bright Encounters	98	4	A Fateful Yarn of a Lumberjack An
4	Academy Dinosaur	1	6	A Epic Drama of a Feminist And a
5	Affair Prejudice	4	5	A Fanciful Documentary of a Frisb
6	African Egg	5	6	A Fast-Paced Documentary of a P
7	Airplane Sierra	7	6	A Touching Saga of a Hunter And
8	Aladdin Calendar	10	6	A Action-Packed Tale of a Man An
9	Alamo Videotape	11	6	A Boring Epistle of a Butler And a
10	Alaska Phantom	12	6	A Fanciful Saga of a Hunter And a

Film replacement cost is less than 14.99

Query | Query History

```
SELECT title,

film_id,

replacement_cost,

description
FROM film
WHERE replacement_cost <14.99
```

Data Output | Messages | Notifications

SQL

	title character varying (255)	film_id [PK] integer	replacement_cost numeric (5,2)	description text
29	Cider Desire	150	9.99	A Stunning Character Study of a
30	Circus Youth	152	13.99	A Thoughtful Drama of a Pastry
31	Closer Bang	159	12.99	A Unbelieveable Panorama of a
32	Club Graffiti	160	12.99	A Epic Tale of a Pioneer And a H
33	Clueless Bucket	162	13.99	A Taut Tale of a Car And a Pione
34	Coma Head	167	10.99	A Awe-Inspiring Drama of a Boy
35	Commandments Express	171	13.99	A Fanciful Saga of a Student An
36	Coneheads Smoochy	172	12.99	A Touching Story of a Womanize
37	Confidential Interview	174	13.99	A Stunning Reflection of a Cat A
38	Contact Anonymous	181	10.99	A Insightful Display of a A Shark

Total rows: 249 Query complete 00:00:00.075

Film rating is either PG or G

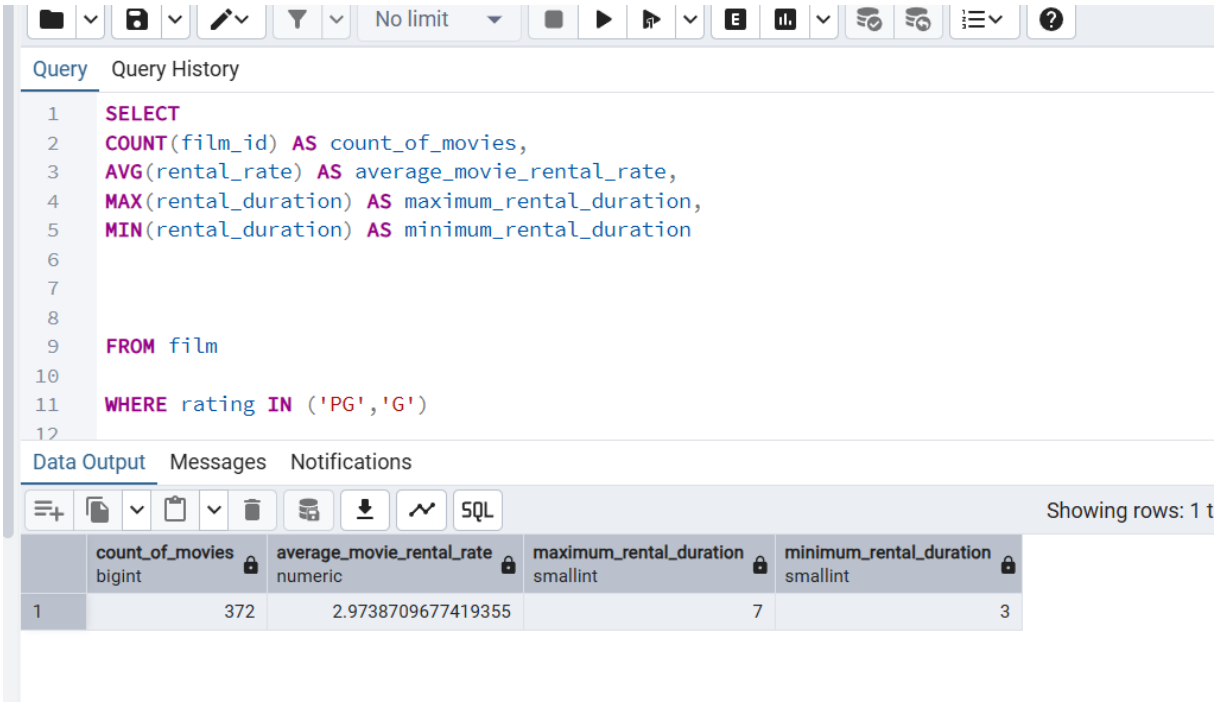
Query | Query History

```
SELECT title,

film_id,

rating,
description
FROM film
WHERE rating ='PG'
OR rating ='G'
ORDER BY rating ASC
```

Data Output | Messages | Notifications

	title character varying (255)	film_id [PK] integer	rating mpaa_rating	description text
1	Lover Truman	537	G	A Emotional Yarn o
2	Lust Lock	542	G	A Fanciful Panoran
3	Darn Forrester	212	G	A Fateful Story of a
4	Affair Prejudice	4	G	A Fanciful Docume
5	Day Unfaithful	216	G	A Stunning Docume

3/The inventory team has asked for more information about this list: count of the movies, average rental rate, and maximum and minimum rental durations



Query | Query History

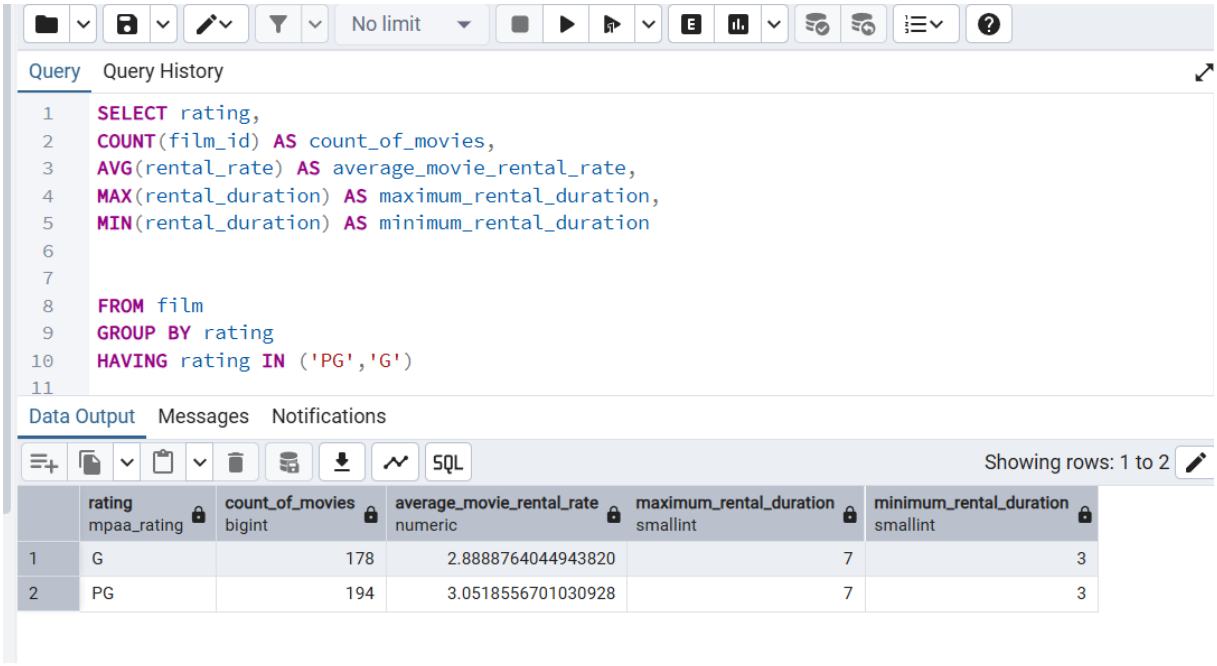
```
SELECT
COUNT(film_id) AS count_of_movies,
AVG(rental_rate) AS average_movie_rental_rate,
MAX(rental_duration) AS maximum_rental_duration,
MIN(rental_duration) AS minimum_rental_duration


FROM film

WHERE rating IN ('PG','G')
```

Data Output | Messages | Notifications

Showing rows: 1 t

	count_of_movies bigint	average_movie_rental_rate numeric	maximum_rental_duration smallint	minimum_rental_duration smallint
1	372	2.9738709677419355	7	3

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



Query | Query History

```
SELECT rating,
COUNT(film_id) 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
GROUP BY rating
HAVING rating IN ('PG','G')
```

Data Output | Messages | Notifications

Showing rows: 1 to 2

	rating mpaa_rating	count_of_movies bigint	average_movie_rental_rate numeric	maximum_rental_duration smallint	minimum_rental_duration smallint
1	G	178	2.8888764044943820	7	3
2	PG	194	3.0518556701030928	7	3