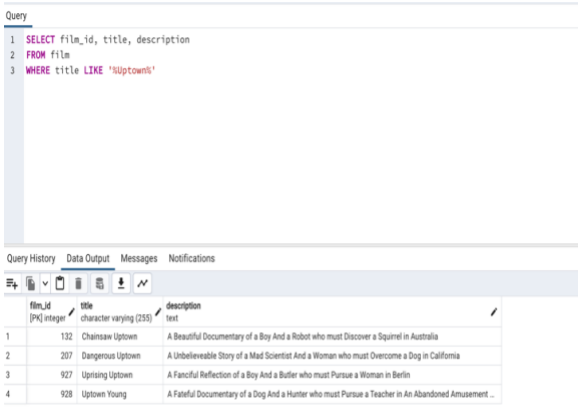
3.5: Filtering Data

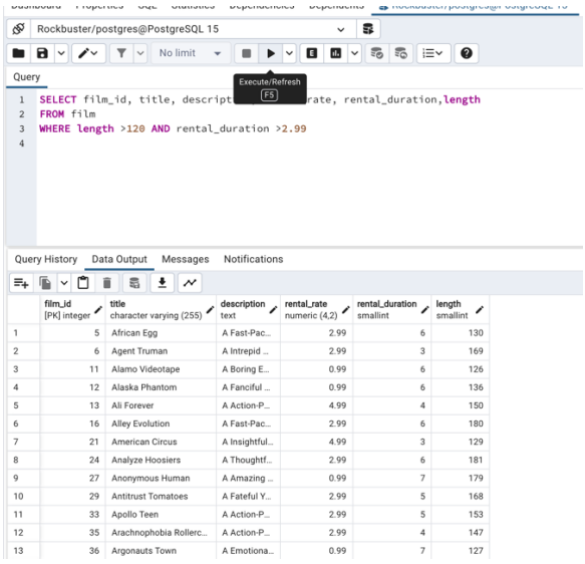
Answers 3.5.

Write some SQL queries to return a list of films that meet the following conditions. Your results tables should include the columns “film_ID,” “title,” and “description”.

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



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



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

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

	film_id [PK] integer	title character varying (255)	description text	rental_rate numeric (4,2)	rental_duration smallint
1	384	Grosse Wonderful	A Epic Dra...	4.99	5
2	8	Airport Pollock	A Epic Tale ...	4.99	6
3	98	Bright Encounters	A Fateful Y...	4.99	4
4	1	Academy Dinosaur	A Epic Dra...	0.99	6
5	4	Affair Prejudice	A Fanciful ...	2.99	5
6	5	African Egg	A Fast-Pac...	2.99	6
7	7	Airplane Sierra	A Touching...	4.99	6
8	10	Aladdin Calendar	A Action-P...	4.99	6
9	11	Alamo Videotape	A Boring E...	0.99	6
10	12	Alaska Phantom	A Fanciful ...	0.99	6
11	213	Date Speed	A Touching...	0.99	4

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	rental_rate numeric (4,2)	rental_duration smallint	length smallint
1	5	African Egg	A Fast-Pac...	2.99	6	130
2	6	Agent Truman	A Intrepid ...	2.99	3	169
3	11	Alamo Videotape	A Boring E...	0.99	6	126
4	12	Alaska Phantom	A Fanciful ...	0.99	6	136
5	13	Ali Forever	A Action-P...	4.99	4	150
6	16	Alley Evolution	A Fast-Pac...	2.99	6	180
7	21	American Circus	A Insightful...	4.99	3	129
8	24	Analyze Hoosiers	A Thoughtf...	2.99	6	181
9	27	Anonymous Human	A Amazing ...	0.99	7	179
10	29	Antitrust Tomatoes	A Fateful Y...	2.99	5	168
11	33	Apollo Teen	A Action-P...	2.99	5	153
12	35	Arachnophobia Rollerc...	A Action-P...	2.99	4	147
13	36	Argonauts Town	A Emotiona...	0.99	7	127

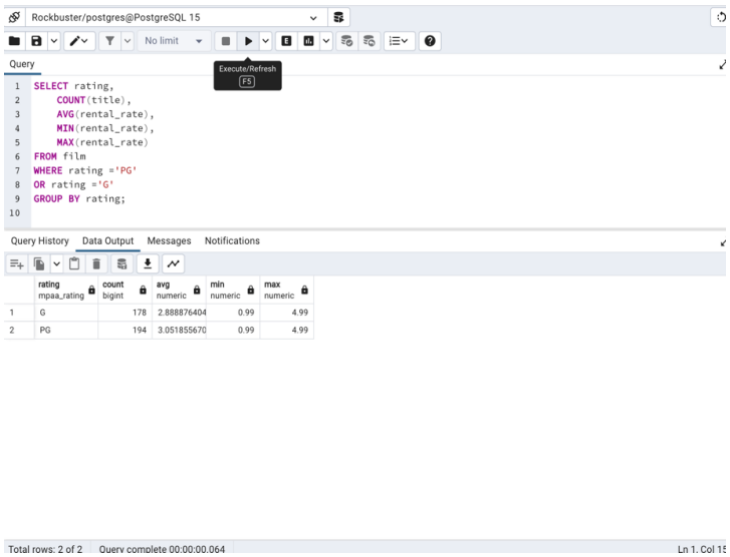
1.e Film rating is either PG or G

```
SELECT *
FROM film
WHERE rating ='PG'
OR rating ='G'
```

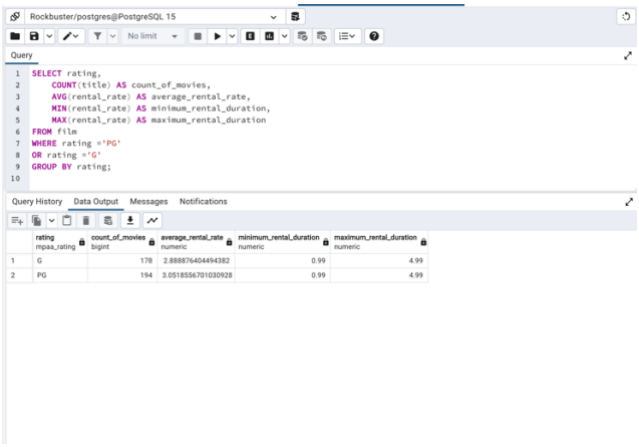
	film_id [PK] integer	description text
1	1	A Epic Drama of a Feminist And a Mad Scientist who must Battle a Teacher in The Canadian Rockies
2	2	A Astounding Epistle of a Database Administrator And a Explorer who must Find a Car in Ancient China
3	4	A Fanciful Documentary of a Frisbee And a Lumberjack who must Chase a Monkey in A Shark Tank
4	5	A Fast-Paced Documentary of a Pastry Chef And a Dentist who must Pursue a Forensic Psychologist in The Gulf of Mexico
5	6	A Intrepid Panorama of a Robot And a Boy who must Escape a Sumo Wrestler in Ancient China
6	11	A Boring Epistle of a Butler And a Cat who must Fight a Pastry Chef in A MySQL Convention
7	12	A Fanciful Saga of a Hunter And a Pastry Chef who must Vanquish a Boy in Australia
8	13	A Action-Packed Drama of a Dentist And a Crocodile who must Battle a Feminist in The Canadian Rockies
9	19	A Emotional Display of a Pioneer And a Technical Writer who must Battle a Man in A Baloon
10	22	A Emotional Character Study of a Dentist And a Crocodile who must Meet a Sumo Wrestler in California
11	25	A Thoughtful Display of a Woman And a Astronaut who must Battle a Robot in Berlin
12	26	A Amazing Panorama of a Pastry Chef And a Boat who must Escape a Woman in An Abandoned Amusement Park
13	37	A Brilliant Panorama of a Mad Scientist And a Mad Cow who must Meet a Pioneer in A Monastery

2. The query you wrote in step 1e returned a list of movies that meet certain criteria (film rating is either PG or G). The inventory team has asked for the following information about this list:

- Count of the movies
- Average rental rate
- Maximum rental duration and minimum rental duration



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”. Run the query and transfer the result into your Excel file on a new sheet as well as the code you used to get there.



4. The customer team would like to see the fields you calculated in step 3 grouped by rating. The totals in your results table should look the same as in step 3, but broken down by the rating column. Copy-paste your query and its output in your answers on a new sheet..