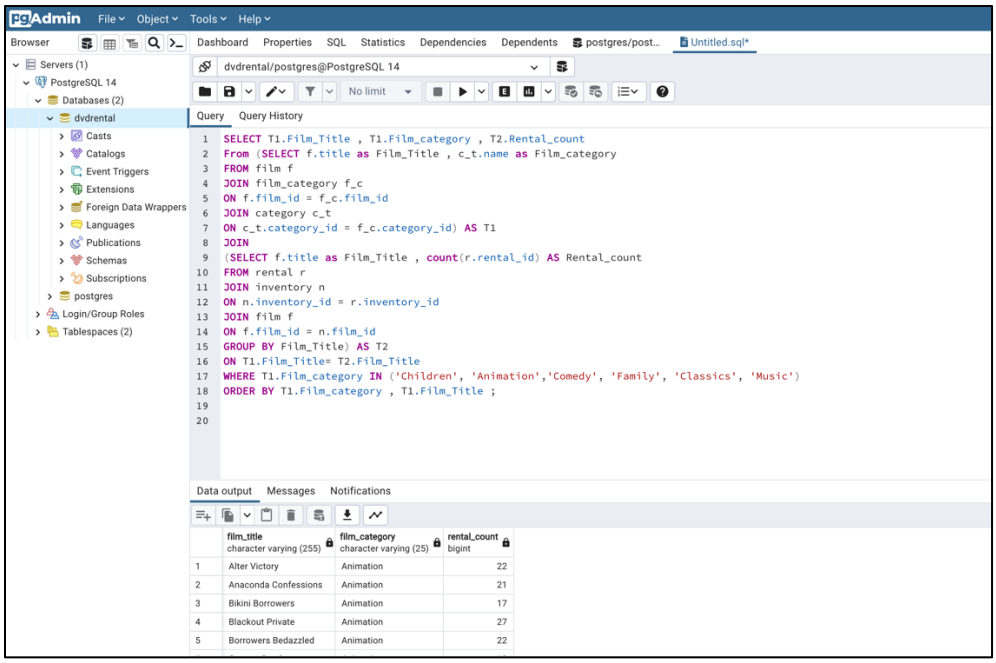
Question 1:

The following categories are considered family movies: Animation, Children, Classics, Comedy, Family and Music. Create a query that lists each movie, the film category it is classified in, and the number of times it has been rented out.

Query 1:

```
SELECT T1.Film_Title , T1.Film_category , T2.Rental_count
From (SELECT f.title as Film_Title , c_t.name as Film_category
FROM film f
JOIN film_category f_c
ON f.film_id = f_c.film_id
JOIN category c_t
ON c_t.category_id = f_c.category_id) AS T1
JOIN
(SELECT f.title as Film_Title , count(r.rental_id) AS Rental_count
FROM rental r
JOIN inventory n
ON n.inventory_id = r.inventory_id
JOIN film f
ON f.film_id = n.film_id
GROUP BY Film_Title) AS T2
ON T1.Film_Title= T2.Film_Title
WHERE T1.Film_category IN ('Children', 'Animation','Comedy', 'Family', 'Classics', 'Music')
ORDER BY T1.Film_category , T1.Film_Title ;
```



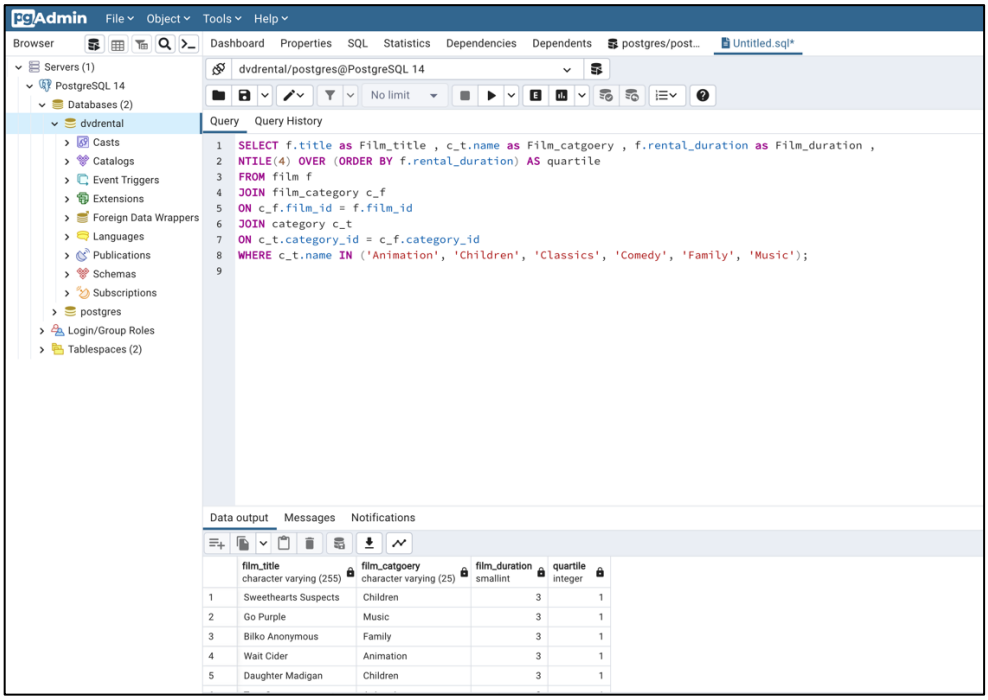
Query 1

Question 2:

Can you provide a table with the movie titles and divide them into 4 levels (first_quarter, second_quarter, third_quarter, and final_quarter) based on the quartiles (25%, 50%, 75%) of the rental duration for movies across all categories? Make sure to also indicate the category that these family-friendly movies fall into.

Query 2:

```
SELECT f.title as Film_title , c_t.name as Film_catgoery , f.rental_duration as Film_duration ,
NTILE(4) OVER (ORDER BY f.rental_duration) AS quartile
FROM film f
JOIN film_category c_f
ON c_f.film_id = f.film_id
JOIN category c_t
ON c_t.category_id = c_f.category_id
WHERE c_t.name IN ('Animation', 'Children', 'Classics', 'Comedy', 'Family', 'Music');
```



Query 2

Question 3:

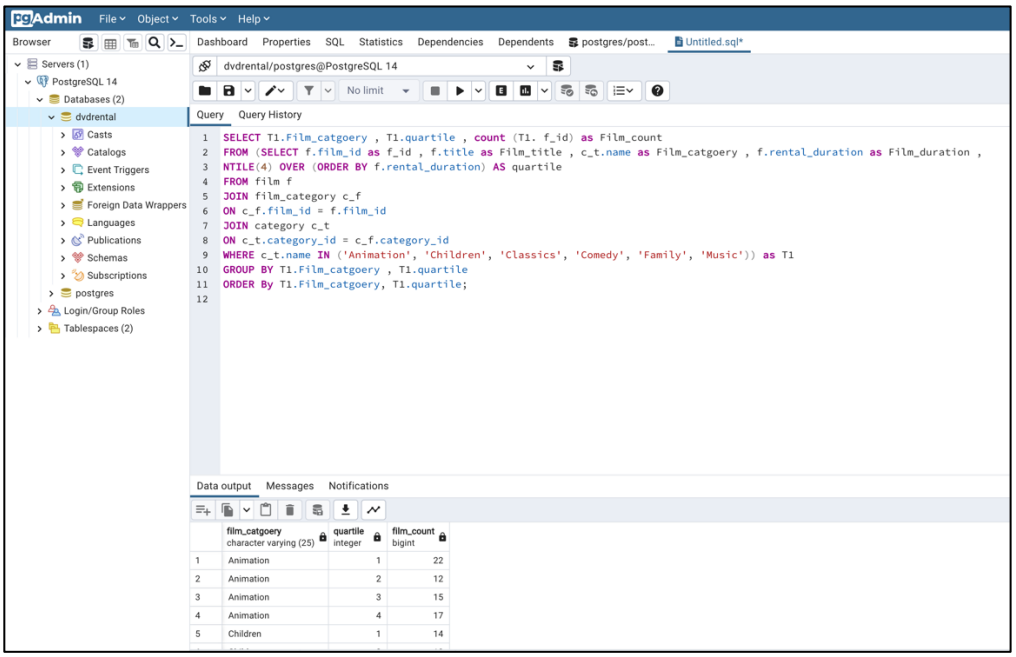
provide a table with the family-friendly film category, each of the quartiles, and the corresponding count of movies within each combination of film category for each corresponding rental duration category. The resulting table should have three columns:

- Category
- Rental length category
- Count

The Count column should be sorted first by Category and then by Rental Duration category.

Query 3:

```
SELECT T1.Film_catgoery , T1.quartile , count (T1. f_id) as Film_count
FROM (SELECT f.film_id as f_id , f.title as Film_title , c_t.name as Film_catgoery , f.rental_duration as Film_duration ,
NTILE(4) OVER (ORDER BY f.rental_duration) AS quartile
FROM film f
JOIN film_category c_f
ON c_f.film_id = f.film_id
JOIN category c_t
ON c_t.category_id = c_f.category_id
WHERE c_t.name IN ('Animation', 'Children', 'Classics', 'Comedy', 'Family', 'Music')) as T1
GROUP BY T1.Film_catgoery , T1.quartile
ORDER By T1.Film_catgoery, T1.quartile;
```



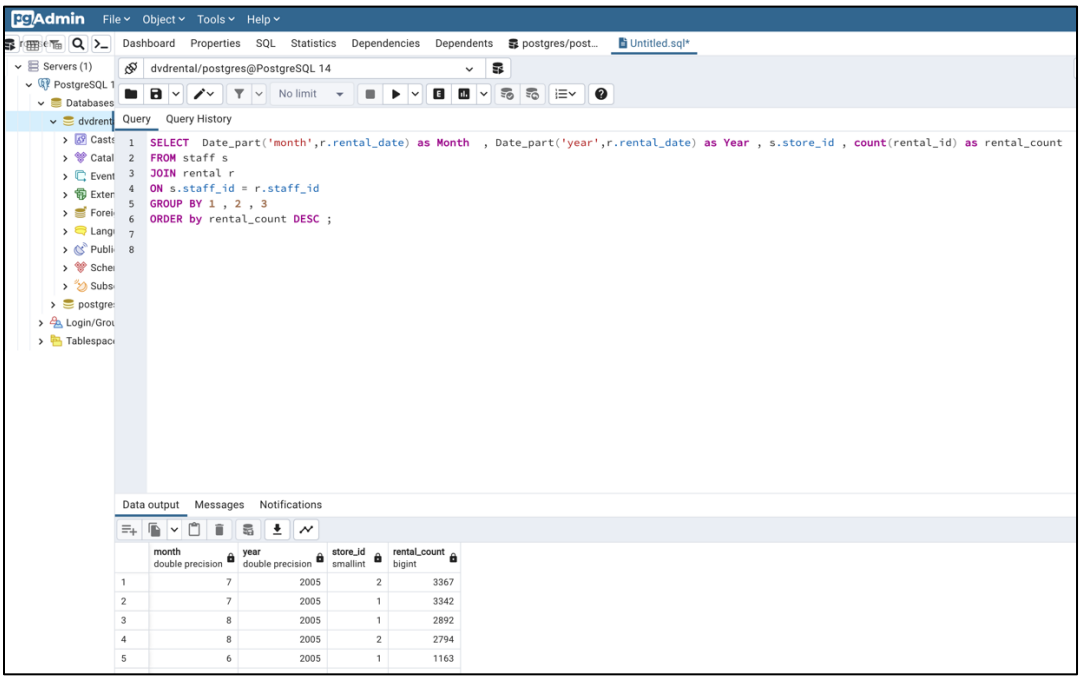
Query 3

Question 4:

Write a query that returns the store ID for the store, the year and month and the number of rental orders each store has fulfilled for that month. Your table should include a column for each of the following: year, month, store ID and count of rental orders fulfilled during that month. The count of rental orders is sorted in descending order.

Query 4:

```
SELECT  Date_part('month',r.rental_date) as Month  , Date_part('year',r.rental_date) as Year ,
s.store_id , count(rental_id) as rental_count
FROM staff s
JOIN rental r
ON s.staff_id = r.staff_id
GROUP BY 1 , 2 , 3
ORDER by rental_count DESC ;
```



Query 4