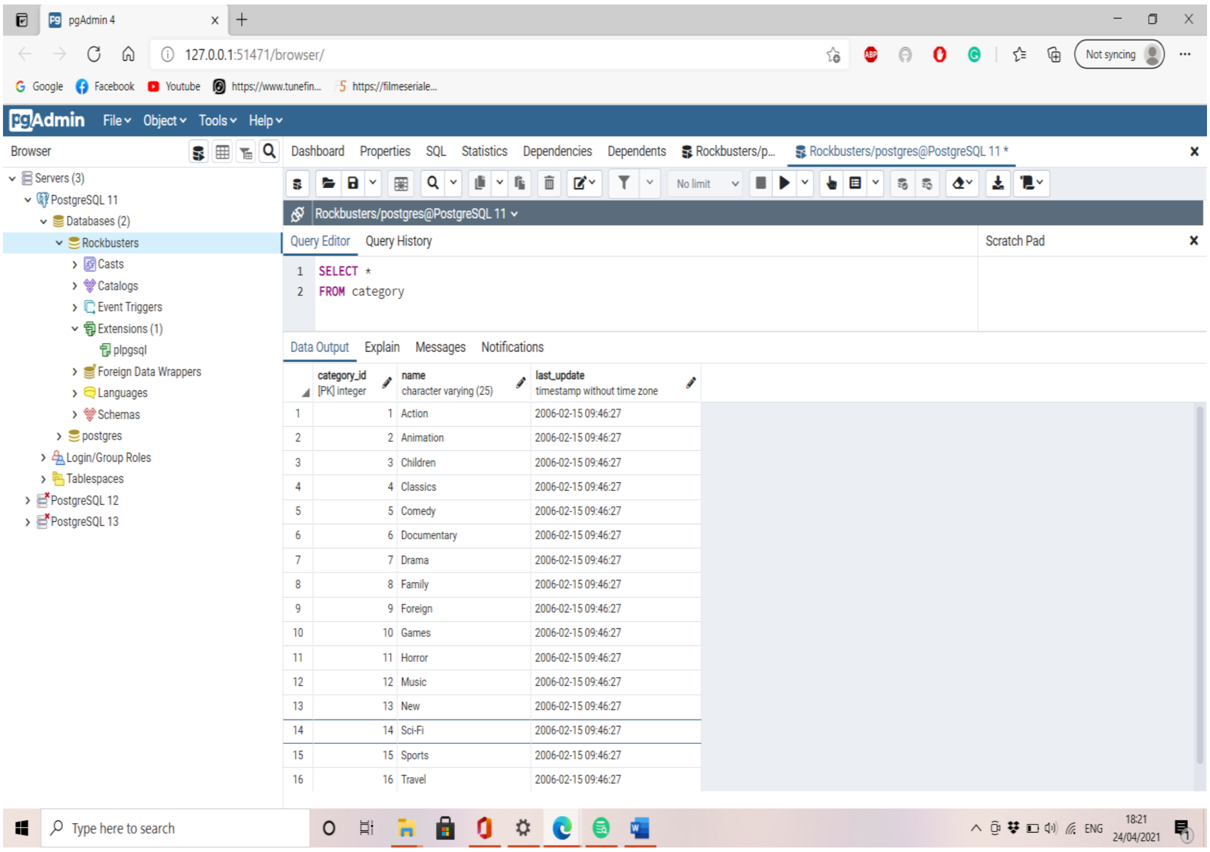
Step 1:

- Your first task is to find out what film genres already exist in the category table:
- Open pgAdmin 4, click the Rockbuster database, and open the Query Tool.
- Write a SELECT command to find out what film genres exist in the category table.
- Copy-paste the output into your answers document or write the answers out—it is up to you. Make sure to include the category ID for each genre.



```sql
SELECT *
FROM category
```

	category_id [PK] integer	name character varying (25)	last_update timestamp without time zone
1	1	Action	2006-02-15 09:46:27
2	2	Animation	2006-02-15 09:46:27
3	3	Children	2006-02-15 09:46:27
4	4	Classics	2006-02-15 09:46:27
5	5	Comedy	2006-02-15 09:46:27
6	6	Documentary	2006-02-15 09:46:27
7	7	Drama	2006-02-15 09:46:27
8	8	Family	2006-02-15 09:46:27
9	9	Foreign	2006-02-15 09:46:27
10	10	Games	2006-02-15 09:46:27
11	11	Horror	2006-02-15 09:46:27
12	12	Music	2006-02-15 09:46:27
13	13	New	2006-02-15 09:46:27
14	14	Sci-Fi	2006-02-15 09:46:27
15	15	Sports	2006-02-15 09:46:27
16	16	Travel	2006-02-15 09:46:27

Step 2:

- You are ready to add some new genres! Write an INSERT statement to add the following genres to the category table: Thriller, Crime, Mystery, Romance, and War:
- Copy-paste your INSERT commands into your answers document.

- **INSERT INTO category (category_id, name)**

  VALUES('17','Thriller')
- **INSERT INTO category (category_id, name)**

  VALUES('18','Crime')
- **INSERT INTO category (category_id, name)**

  VALUES('19','Mystery')
- **INSERT INTO category (category_id, name)**

  VALUES('20','Romance')
- **INSERT INTO category (category_id, name)**

  VALUES('21','War')

- The CREATE statement below shows the constraints on the category table. Write a short paragraph explaining the various constraints that have been applied to the columns. What do these constraints do exactly? Why are they important?

```
•  CREATE TABLE category
•  (
•    category_id integer NOT NULL DEFAULT nextval('category_category_id_seq'::
   regclass),
•    name text COLLATE pg_catalog."default" NOT NULL,
•    last_update timestamp with time zone NOT NULL DEFAULT now(),
•    CONSTRAINT category_pkey PRIMARY KEY (category_id)
●  );
```

- The NOT NULL constraint has been applied to several columns. This means that the records in those columns cannot be empty. This is important because it prevents people from omitting important information when entering it into the database.
- The PRIMARY KEY constraint has been applied too. This means that the entries in that column must be unique and not null. (Unique means that no entry in that column can be repeated.) This is important because if a column is a primary key, it must be able to link data across different tables, which can only happen is the entries are unique and not null.

Step 3:

- The genre for the movie African Egg needs to be updated to thriller. Work through the steps below to make this change:
- Write the SELECT statement to find the film_id for the movie African Egg.
- Once you have the film_ID and category_ID, write an UPDATE command to change the category in the film_category table (not the category table). Copy-paste this command into your answers document.

```
SELECT *
FROM film
WHERE title=’African Egg’
film_id = 5

SELECT *
FROM film_category
WHERE film_id=5
category_id = 8

UPDATE category
SET name=’Thriller’
WHERE category=8
```

Step 4:

- Since there are not many movies in the mystery category, you and your manager decide to remove it from the category table. Write a DELETE command to do so and copy-paste it into your answers document.

-
  ```
  DELETE FROM category
  WHERE name=’Mystery’
  ```

Step 5:

- Based on what you have learned so far, think about what it would be like to complete steps 1 to 4 with Excel instead of SQL. Are there any pros and cons to using SQL? Write a paragraph explaining your answer.

Completing these steps in Excel would involve direct manipulation of the tables, rows, and columns. I do not think it would be any harder or easier, simply different. The pro to using SQL is that everything is completed using commands so there is no need to search through different sheets for the information you need. In a sense, there is less movement using SQL. Everything is retrieved from the query tool. The con is that it takes time to learn the appropriate commands to retrieve and manipulate the data in SQL. It is easy to make a typo and the tables are always never directly in front of you like Excel, so there is a bit of a disconnect between you and the data.