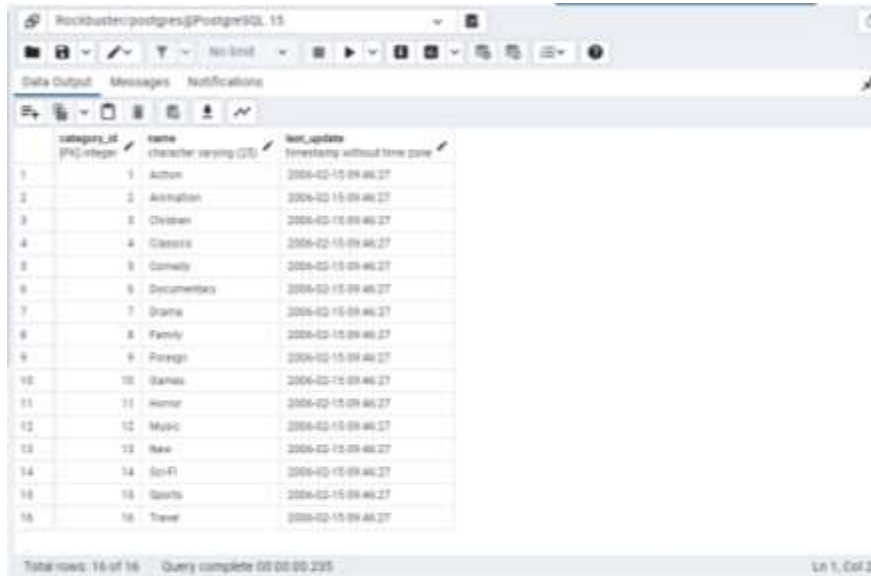


1. Open pgAdmin 4, click the Rockbuster database, and open the Query Tool.

Write a SELECT command to find out what film genres exist in the category table.

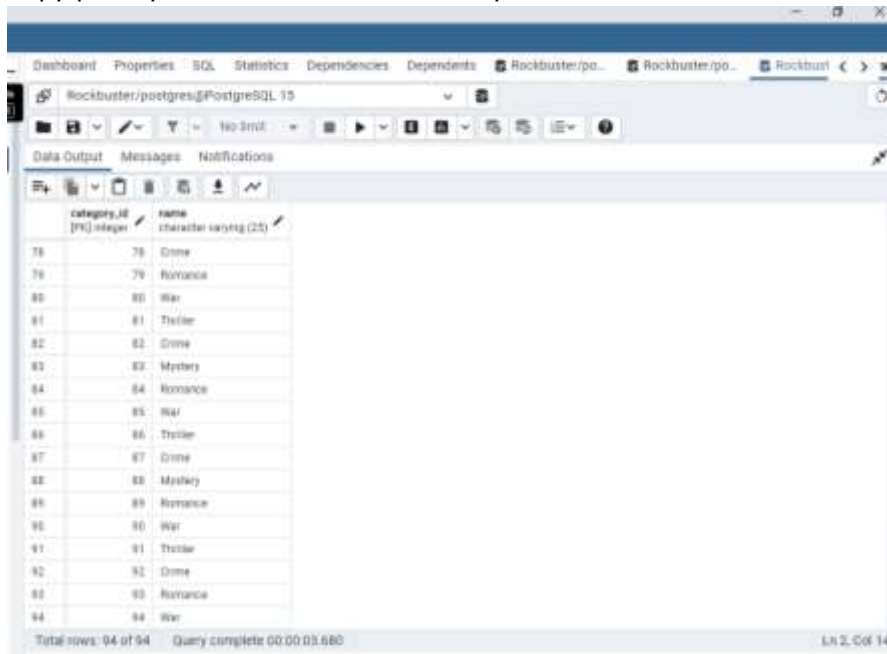
- SELECT * FROM Film Category



category_id	name	character_varying (25)	last_update
1	Action		2004-02-15 09:46:27
2	Animation		2004-02-15 09:46:27
3	Children		2004-02-15 09:46:27
4	Classics		2004-02-15 09:46:27
5	Comedy		2004-02-15 09:46:27
6	Documentaries		2004-02-15 09:46:27
7	Drama		2004-02-15 09:46:27
8	Family		2004-02-15 09:46:27
9	Fantasy		2004-02-15 09:46:27
10	Games		2004-02-15 09:46:27
11	Horror		2004-02-15 09:46:27
12	Music		2004-02-15 09:46:27
13	News		2004-02-15 09:46:27
14	Sci-Fi		2004-02-15 09:46:27
15	Sports		2004-02-15 09:46:27
16	Travel		2004-02-15 09:46:27

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.



category_id	name	character_varying (25)	last_update
78	Crime		
79	Romance		
80	War		
81	Thriller		
82	Crime		
83	Mystery		
84	Romance		
85	War		
86	Thriller		
87	Crime		
88	Mystery		
89	Romance		
90	War		
91	Thriller		
92	Crime		
93	Romance		
94	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)
);
```

- NOT NULL: no empty content is allowed within that column (category_id, name, last_update), an error message will appear if an empty record is attempted to be inserted DEFAULT: if a record is inserted with a missing value, it will be replaced by the given default value (category_id, name, last_update)
- PRIMARY KEY: the category_id will be set as the primary key, making it unique Constraints specify what type of data a table or column can accept, and they're typically set when a table is created. Done properly, constraints make querying the database quicker and easier. They may even act as a data quality check in certain situations.

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.

Dashboard Properties SQL Statistics Dependencies Dependents Rockbuster/pg... Rockbuster/postgres@PostgreSQL 15

Rockbuster/postgres@PostgreSQL 15

Query Query History

```
1. SELECT * FROM f11a_category WHERE f11a_id = 5
```

Scratch Pad

Data Output Messages Notifications

f11a_id	category_id	lastUpdate
[PK] integer	[PK] integer	timestamp without time zone
5	5	17 2023-12-04 17:40:58.112187

Dashboard Properties SQL Statistics Dependencies Dependents Rockbuster/pg... Rockbuster/pg... Rockbust

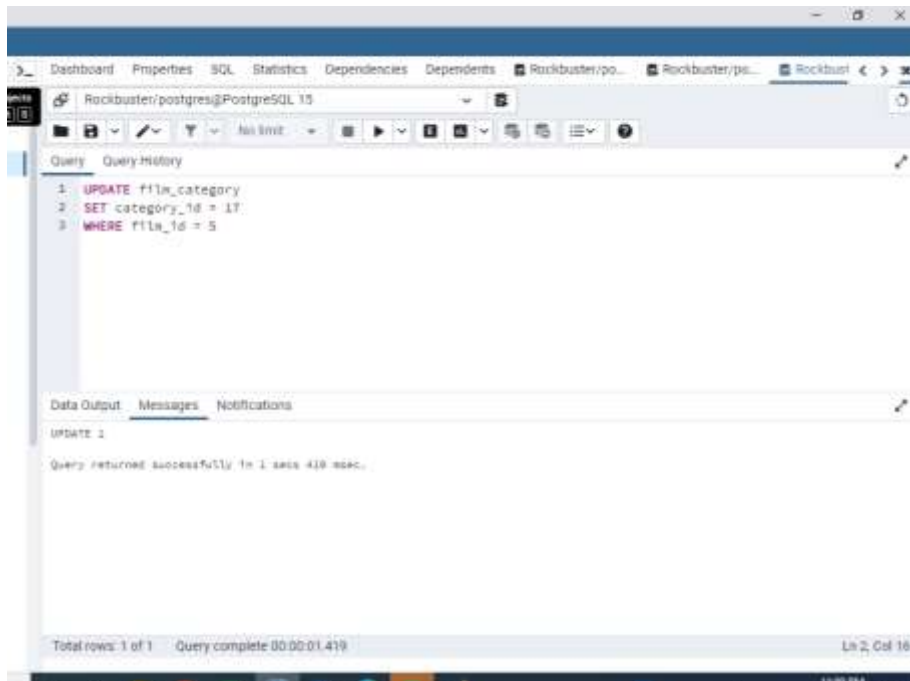
Rockbuster/postgres@PostgreSQL 15

Query Query History

```
1. SELECT category_id , f11a_id
2. FROM f11a_category
3. WHERE f11a_id = 5
```

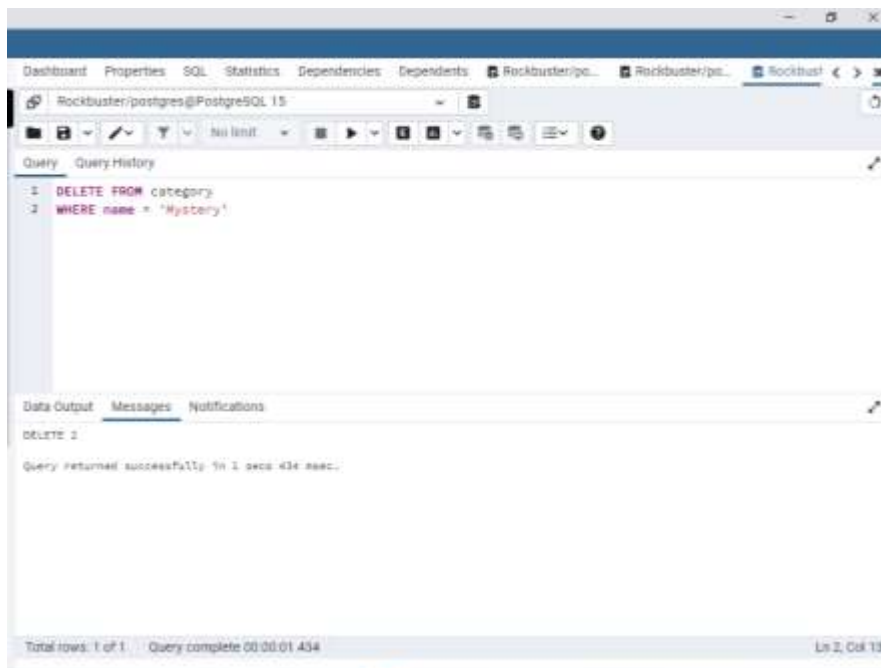
Data Output Messages Notifications

category_id	f11a_id
[PK] integer	[PK] integer
5	5



- Step 4:

Since there aren't 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.



Based on what you've 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.

Step 1: I think SQL and Excel are quite similar in that case. In Excel I would have to create a Pivot Table to get this information and in SQL I have to write the SELECT command. To me, the effort is quite the same.

Step 2: SQL makes it easier to insert new categories because I can create them without filling in the other tables. In excel, I would have a particularly empty row (if all the tables were merged to one spreadsheet)

Step 3: Changing the category for a specific film is easier using SQL. Here, I only have one step (the UPDATE command), while in Excel I would need to filter for the film name and then, replace the category.