**SQL for Data Analysts**

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’s up to you. Make sure to include the category ID for each genre.

Graphical user interface, application

Description automatically generated

You’re 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.
* 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?

**NOT NULL constraint** :This help to ensure that no columns have any missing or empty value.

**category\_id :** (data type is integer)Value cannot be null

**name:** (data type is text) Values cannot be null

**last\_update:** ( data type is timestamp with time zone) value cannot be null

**PRIMARY KEY constraint**: is a unique identifier for each record in a table

**Category\_pkey** which is the category\_id is set as the primary key.

**What do these constraints do exactly? Why are they important?**

Constraints are important as they ensure that values in columns are always formatted by preventing duplicates or values that are not required in a column. They can also help restrict values that don’t meet a certain condition and many more

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)

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**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*.

Graphical user interface, text, application, Word

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* 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.

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Graphical user interface, application

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**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.

DELETE FROM category

WHERE name = 'Mystery' ;

**Step 5:**

**PROS**: Finding and updating tables using pgAdmin is easier than Excel because you can use queries to find the exact tables and rows you'd like to see and use commands to update values automatically. Excel is more cumbersome because you have to manually sort through multiple worksheets to find the table you want, filter out the rows of values you'd want to read or update, then manually make changes.

**CONS:** Need prior know-how to run and execute SQL commands therefore it is not as easy to use as Excel.

**Bonus Task**

The SQL query below contains some typos. See if you can fix it based on what you've learned so far about SQL and data types; then try running it in pgAdmin 4. If the query works, copy it into your Answers 3.3 document.

If you get this you're a SQL champ!

CREATE TBL 3EMPLOYEES

{

employee\_id VARINT(30) NOT EMPTY

name VARCHAR(50),

contact\_number VARCHAR(30) ,

designation\_id INT,

last\_update TIMESTAMP NOT NULL DEF now()

CONSTRAIN employee\_pkey PRIMARY KEY (employee\_id)

}

**ANSWER**

CREATE TABLE employees

( employee\_id varchar(30) NOT NULL ,

name varchar(50) ,

contact\_number varchar(30) ,

designation\_id INT ,

last\_update timestamp NOT NULL DEFAULT now() ,

CONSTRAINT employee\_pkey PRIMARY KEY (employee\_id) ) ;