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Data Immersion 3.3

SQL for Data Analysts

**Step 1:**

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

**A screenshot of a computer screen

AI-generated content may be incorrect.**

**Step 2:**

**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:**

INSERT INTO category(name, last\_update)

VALUES

('Thriller', NOW()),

('Crime', NOW()),

('Mystery', NOW()),

('Romance', NOW()),

('War', NOW());

**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?**

This CREATE TABLE statement defines the structure and constraints of the category table. Each constraint plays a crucial role in maintaining data integrity:

* **category\_id integer NOT NULL DEFAULT nextval(...)**: This sets category\_id as a required field (NOT NULL) and uses a sequence to auto-generate a unique ID for each new row. It ensures that every category has a unique identifier without manual input.
* **name text NOT NULL**: This ensures that each category must have a name and prevents the insertion of records with empty names. It's important for usability and data clarity.
* **last\_update timestamp with time zone NOT NULL DEFAULT now()**: Automatically records the timestamp of when the row was created or last updated. This helps with tracking changes and auditing data over time.
* **CONSTRAINT category\_pkey PRIMARY KEY (category\_id)**: This sets category\_id as the primary key, ensuring that each row is uniquely identifiable and no duplicates exist for this column.

**Step 3:**

**Write the SELECT statement to find the film\_id for the movie African Egg.**

SELECT \*  
FROM film  
WHERE title = '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.**

UPDATE film\_category

SET category\_id= 7

WHERE film\_id = 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.**

DELETE FROM category  
WHERE name = ‘Mystery’;

**Step 5:**

**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.

Based on what I’ve learned so far, using excel would be much more laborious in completing steps 1 through 4. Scrolling through different tables and datasets, then filtering down to find my intended results would take significantly longer than simply entering a query in SQL. I also believe it opens the door to increased possibilities of human error which would not be as easy to find as within SQL. The error flagging in SQL would aid in reducing such human errors, though not 100%. It would also be easier to check my work through the SELECT function.