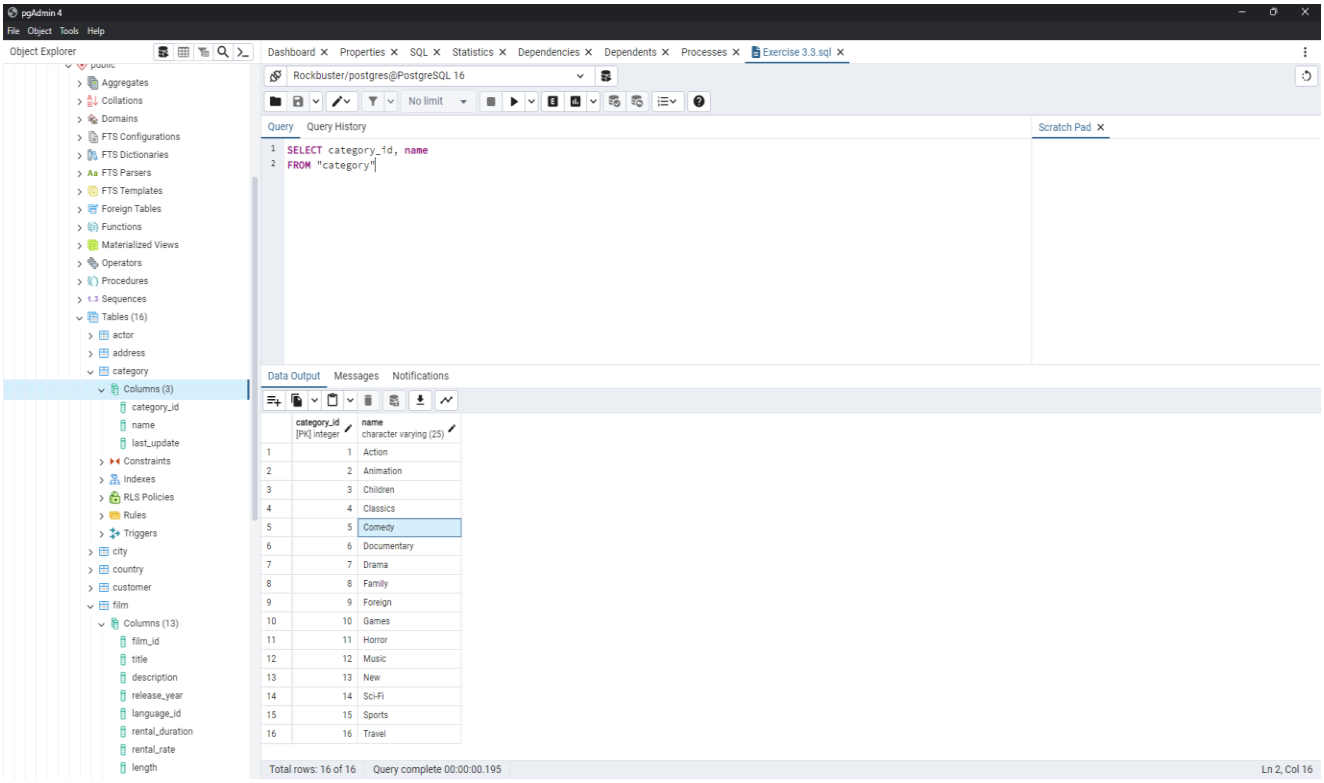
Mandy Yeung
Data Immersion Exercise 3.3

Step 1:

SELECT category_id, name
FROM “category”



Step 2:

INSERT INTO category (name)
VALUES ('Triller'), ('Crime'), ('Mystery'), ('Romance'), ('War')

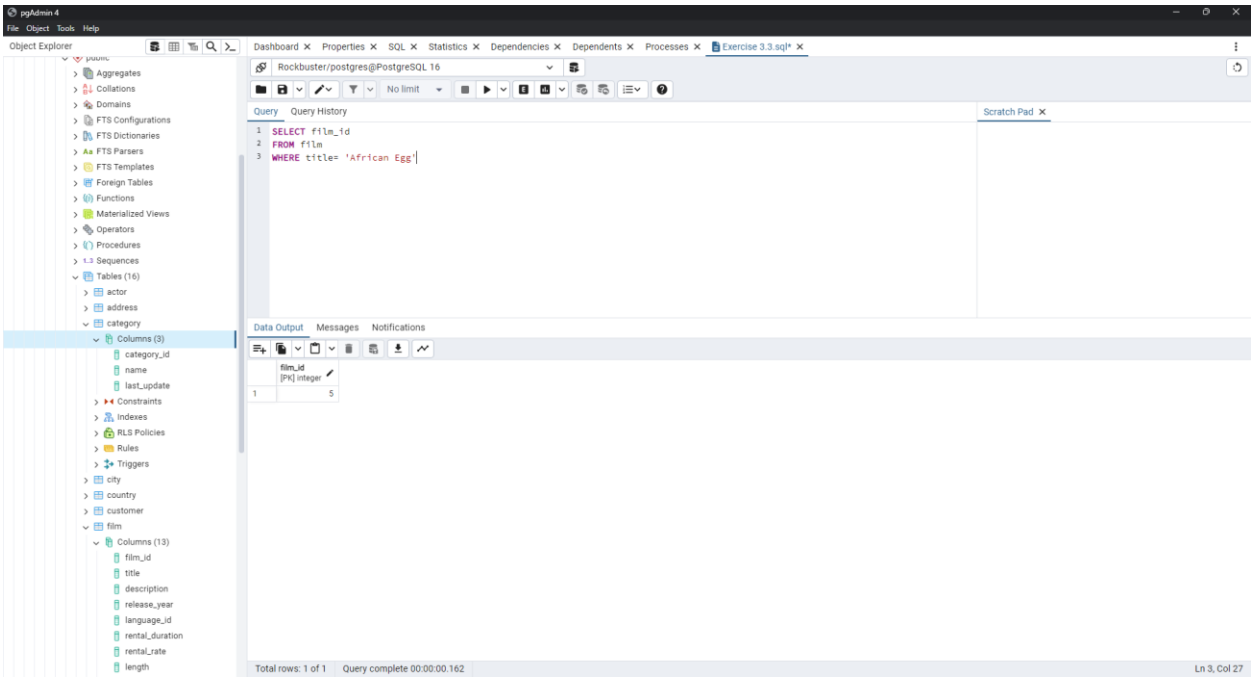
```
CREATE TABLE category
(
  category_id integer NOT NULL DEFAULT nextval('category_category_id_seq'::regclass),
  name text COLLATE pg_catalog."default" NOT NULL,
  last_update timestamp with time zone NOT NULL DEFAULT now(),
  CONSTRAINT category_pkey PRIMARY KEY (category_id)
);
```

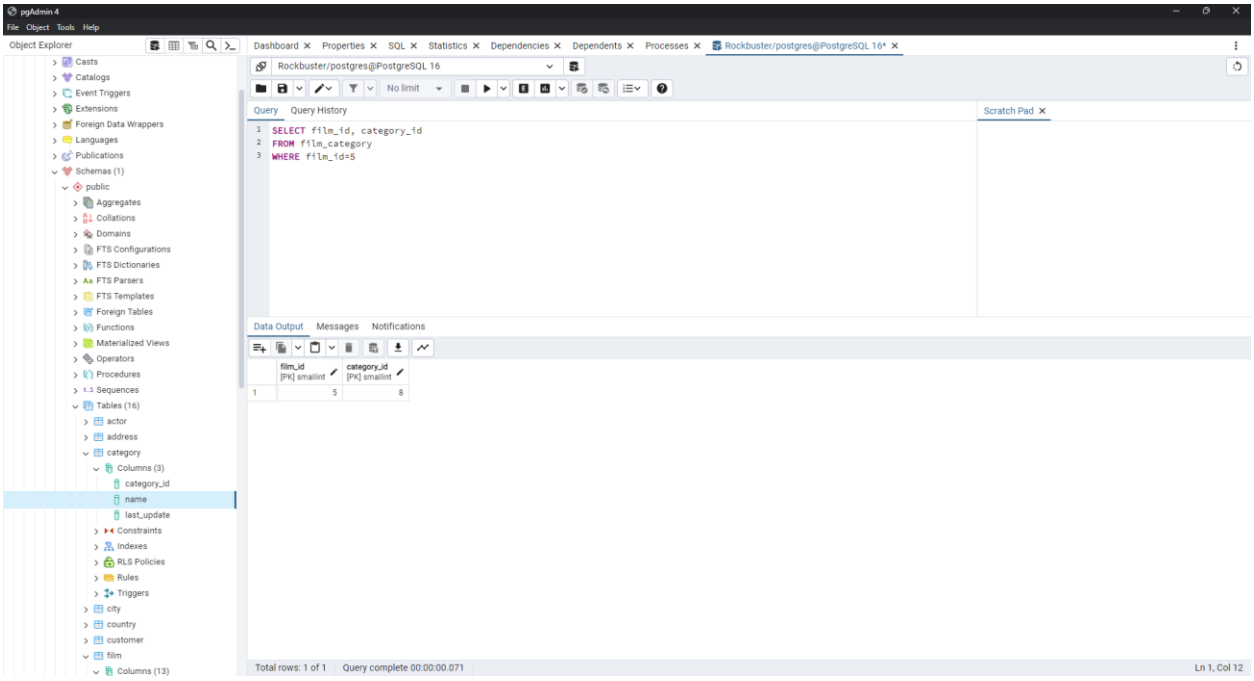
category_id – cannot be empty (NOT NULL), this constraint ensures there are no value missing from any column. That is important to keep the database accurate and not allow empty records.

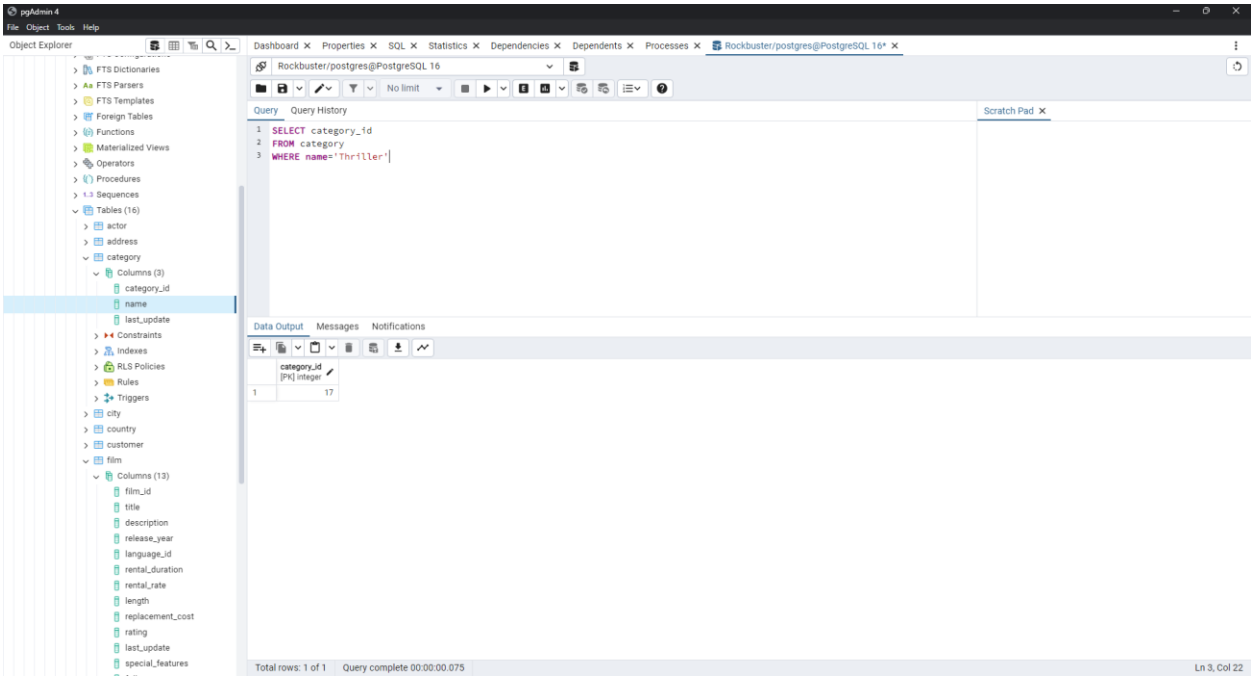
Name – represented in text values according to specific to configuration file and CONSTRAINT NOT NULL added to ensure there are no empty record.

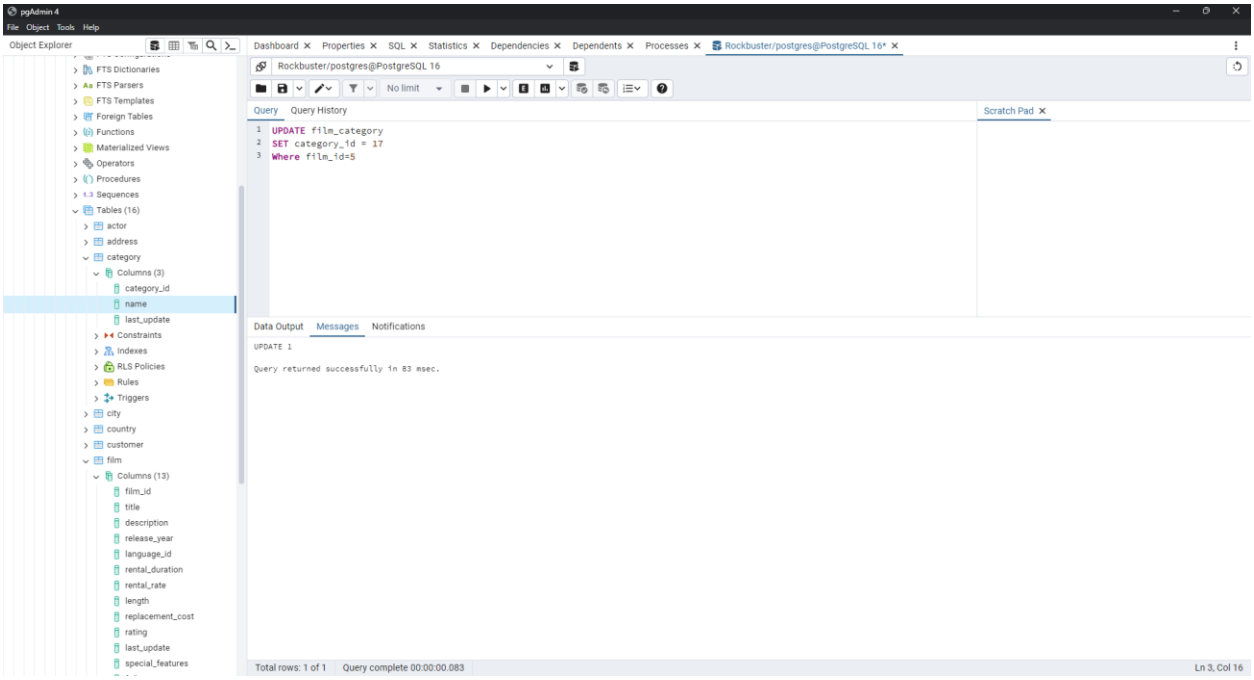
Last_update – in this CONSTRAINT NOT NULL is utilized to make sure the record is not empty, and the DEFAULT now automatically fills the record.

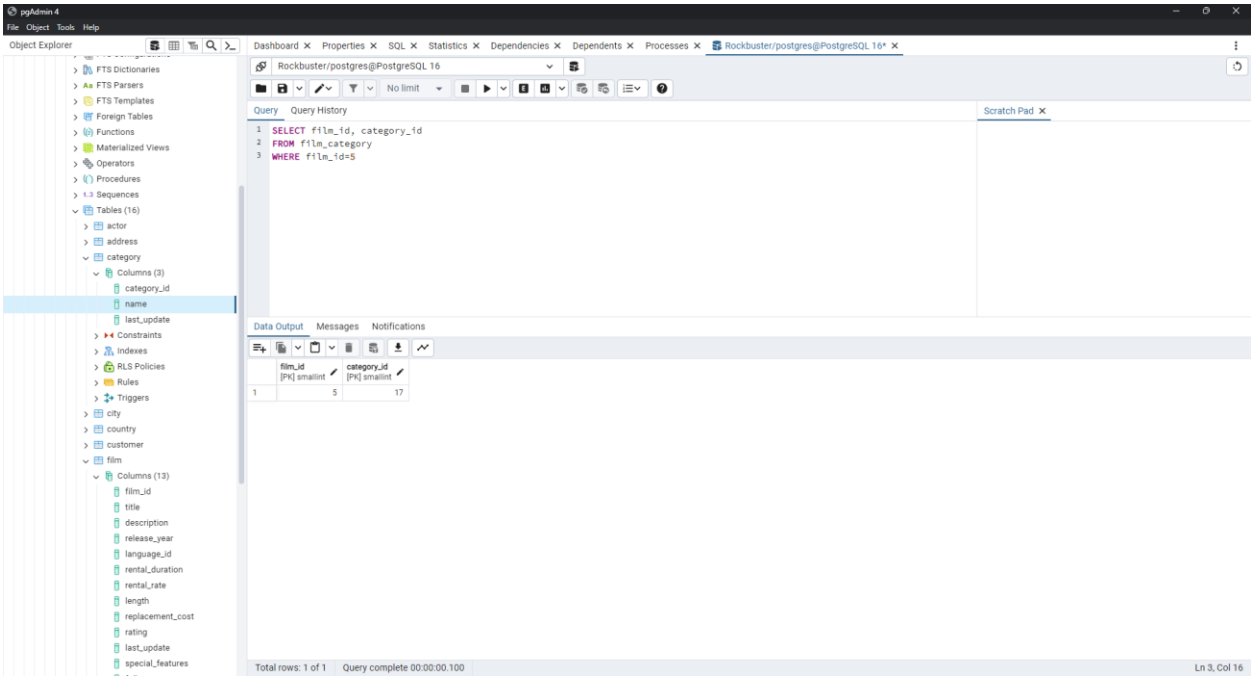
Step 3:



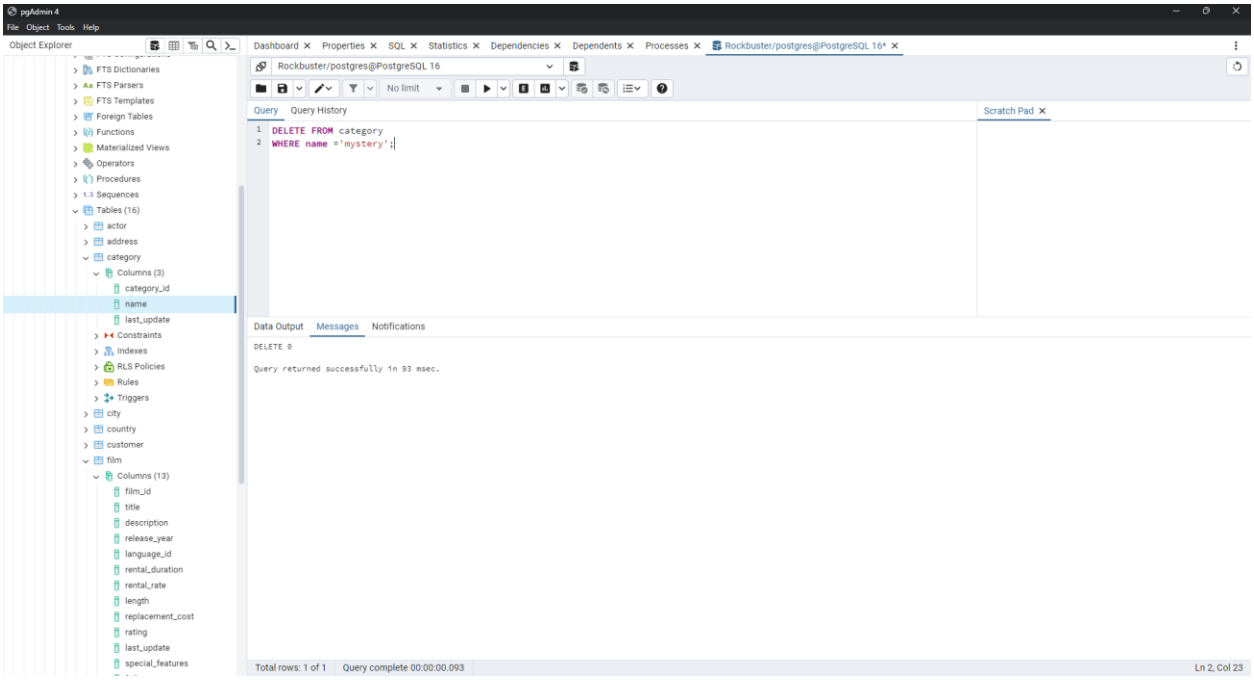

pgAdmin 4
File Object Tools Help
Object Explorer
Dashboard Properties SQL Statistics Dependencies Dependents Processes Rockbuster/postgres@PostgreSQL 16*
Rockbuster/postgres@PostgreSQL 16
No limit
Query Query History
Scratch Pad
SELECT film_id, category_id
FROM film_category
WHERE film_id=5
Data Output Messages Notifications
film_id [PK] smallint
category_id [PK] smallint
1 5 8
Total rows: 1 of 1
Query complete 00:00:00.071
Ln 1, Col 12


pgAdmin 4
File Object Tools Help
Object Explorer
Dashboard Properties SQL Statistics Dependencies Dependents Processes Rockbuster/postgres@PostgreSQL 16*
Rockbuster/postgres@PostgreSQL 16
No limit
Query Query History
Scratch Pad
SELECT category_id
FROM category
WHERE name='Thriller'
Data Output Messages Notifications
category_id [PK] integer
1 17
Total rows: 1 of 1
Query complete 00:00:00.075
Ln 3, Col 22


pgAdmin 4
File Object Tools Help
Object Explorer
Dashboard Properties SQL Statistics Dependencies Dependents Processes Rockbuster/postgres@PostgreSQL 16*
Rockbuster/postgres@PostgreSQL 16
No limit
Query Query History
Scratch Pad
UPDATE film_category
SET category_id = 17
Where film_id=5
Data Output Messages Notifications
UPDATE 1
Query returned successfully in 83 msec.
Total rows: 1 of 1
Query complete 00:00:00.083
Ln 3, Col 16


pgAdmin 4
File Object Tools Help
Object Explorer
Dashboard Properties SQL Statistics Dependencies Dependents Processes Rockbuster/postgres@PostgreSQL 16*
Rockbuster/postgres@PostgreSQL 16
No limit
Query Query History
Scratch Pad
SELECT film_id, category_id
FROM film_category
WHERE film_id=5
Data Output Messages Notifications
film_id [PK] smallint
category_id [PK] smallint
5
17
Total rows: 1 of 1
Query complete 00:00:00.100
Ln 3, Col 16

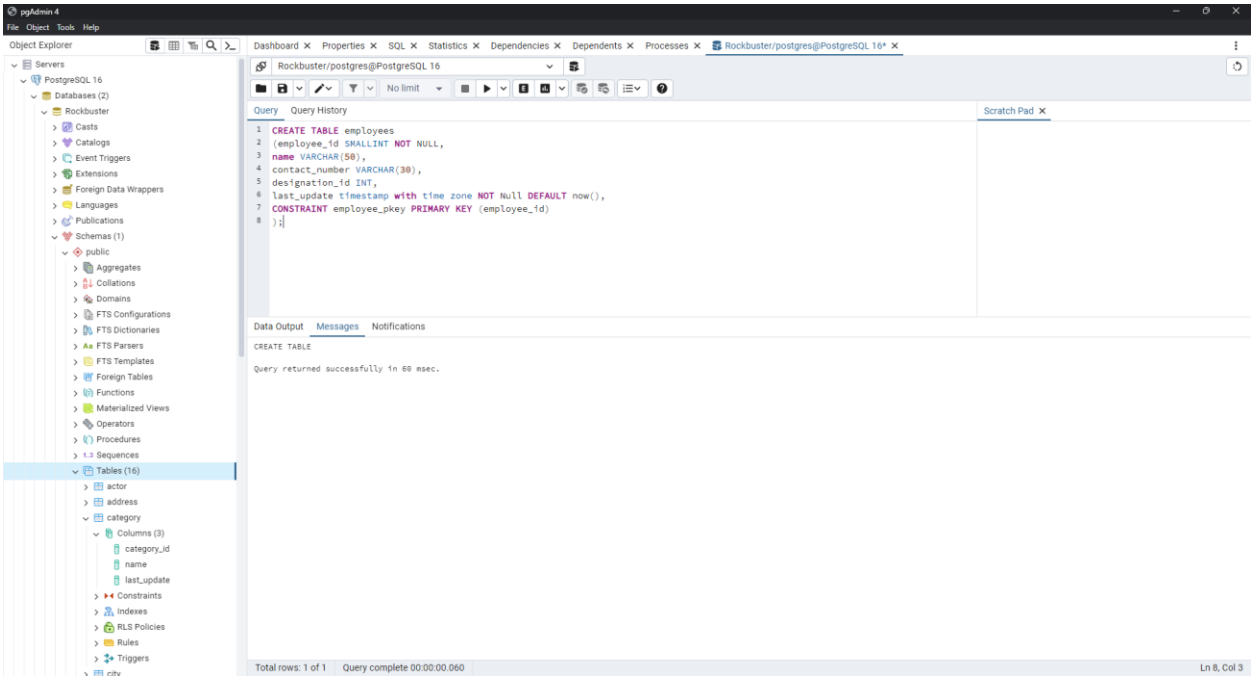
Step 4:



Step 5:

While Excel is user-friendly, it does struggle with scalability and data integrity. SQL is much safer for data storage than it is Excel, but SQL does require a bit more complex knowledge whereas Excel offers ease of use and accessibility for simple task. With more practice and expertise, SQL provides much superior efficiency, scalability, and data safety. Updating data will require more steps in Excel than SQL which can be time consuming.

BONUS TASK


pgAdmin 4
File Object Tools Help
Object Explorer
Servers
PostgreSQL 16
Databases (2)
Rockbuster
Casts
Catalogs
Event Triggers
Extensions
Foreign Data Wrappers
Languages
Publications
Schemas (1)
public
Aggregates
Collations
Domains
FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Operators
Procedures
Sequences
Tables (16)
actor
address
category
Columns (3)
category_id
name
last_update
Constraints
Indexes
RLS Policies
Rules
Triggers
Dashboard
Properties
SQL
Statistics
Dependencies
Dependents
Processes
Rockbuster/postgres@PostgreSQL 16*
Rockbuster/postgres@PostgreSQL 16
No limit
Query
Query History
Scratch Pad
1 CREATE TABLE employees
2 (employee_id SMALLINT NOT NULL,
3 name VARCHAR(50),
4 contact_number VARCHAR(30),
5 designation_id INT,
6 last_update timestamp with time zone NOT Null DEFAULT now(),
7 CONSTRAINT employee_pkey PRIMARY KEY (employee_id)
8);
Data Output
Messages
Notifications
CREATE TABLE
Query returned successfully in 60 msec.
Total rows: 1 of 1
Query complete 00:00:00.060
Ln 8, Col 3