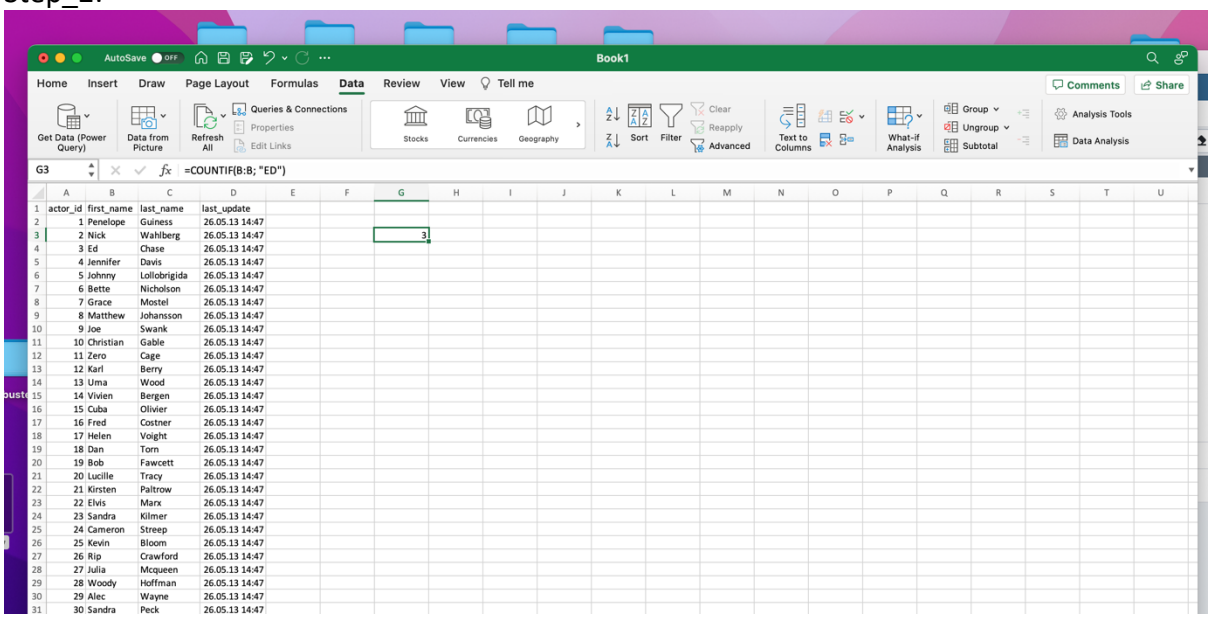
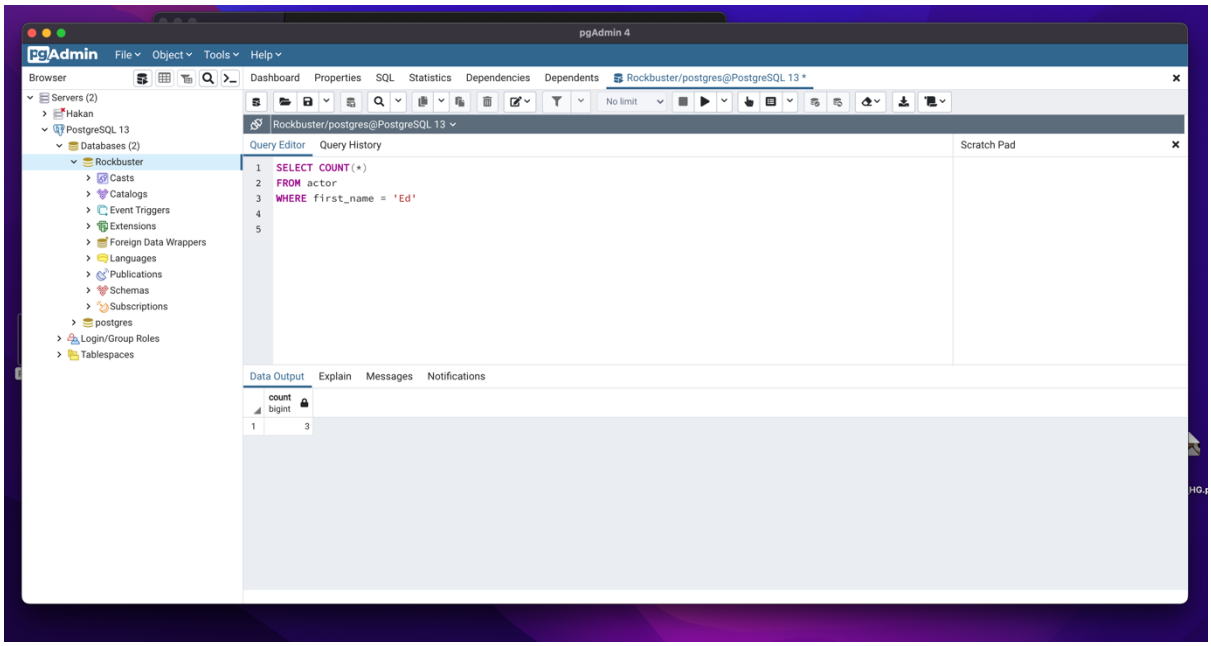
TASK_3.1: Intro to Relational Databases

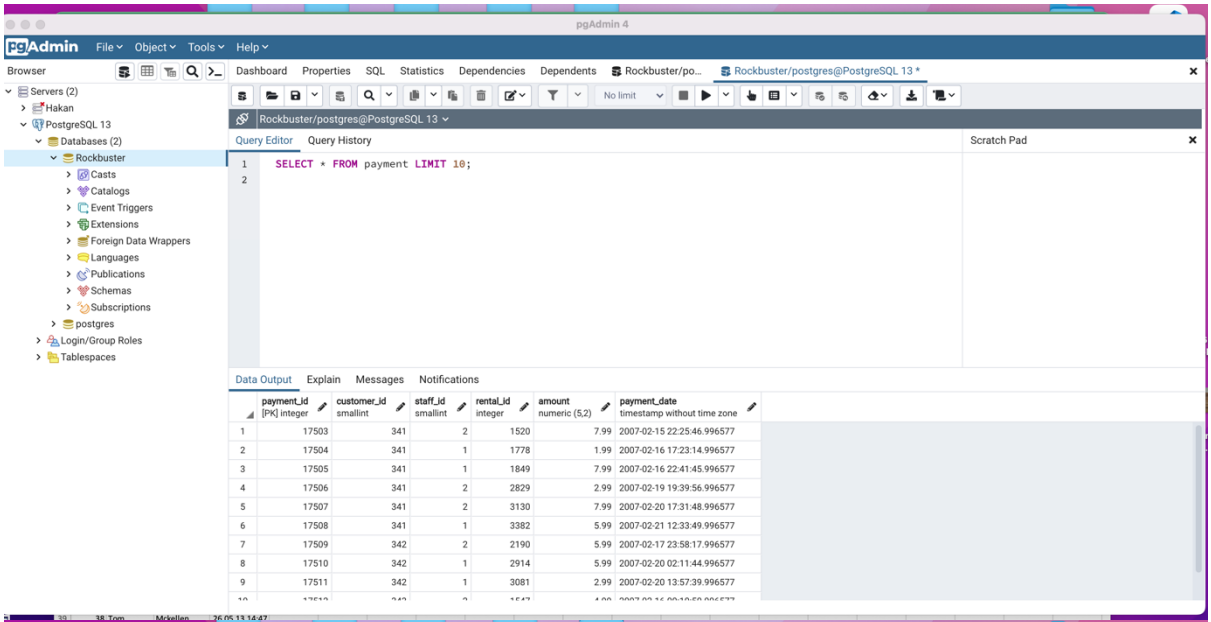
Step_2:

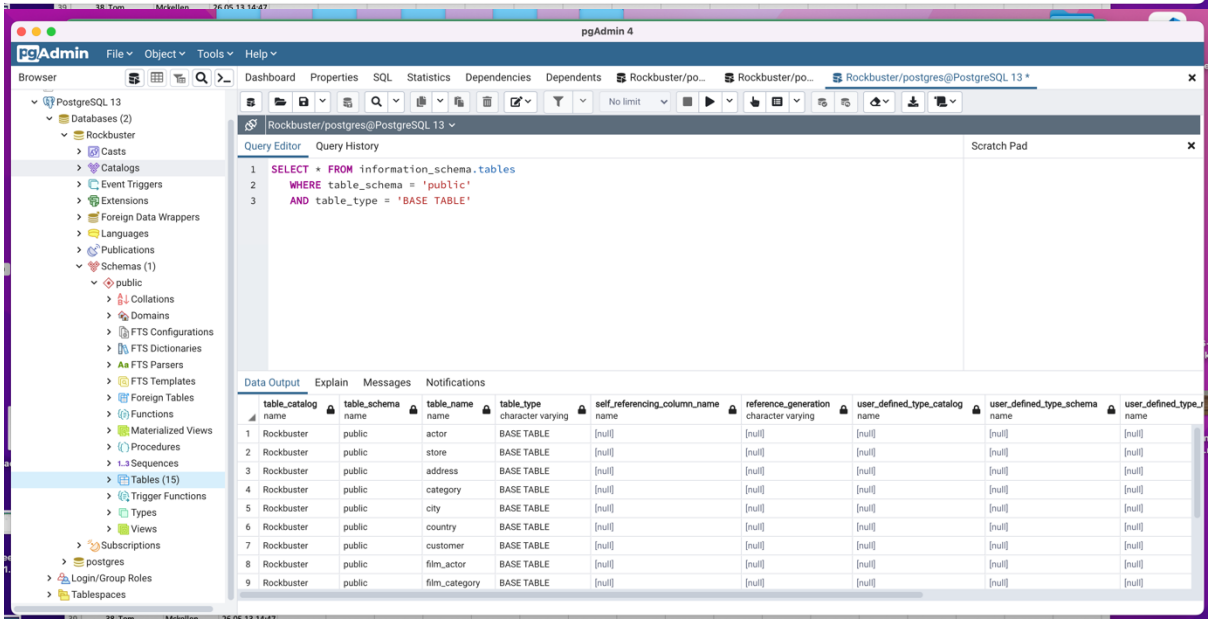


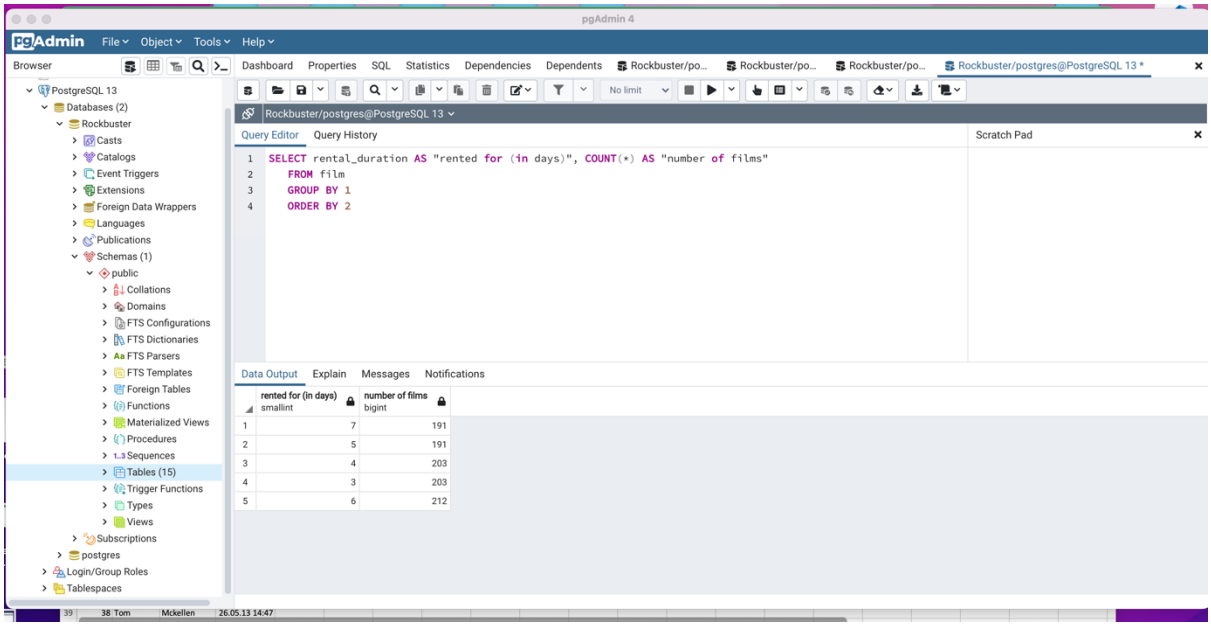


- I used „ =COUNTIF“ function in Excel to measure the counts of the name “ed”. Both results were 3.
- Excel was simple than pgAdmin 4 but pgAdmin is more fun, challenging, and professional.

Step_3:


pgAdmin 4
File Object Tools Help
Browser
Dashboard Properties SQL Statistics Dependencies Dependents Rockbuster/po... Rockbuster/postgres@PostgreSQL 13 *
Servers (2)
Hakan
PostgreSQL 13
Databases (2)
Rockbuster
Casts
Catalogs
Event Triggers
Extensions
Foreign Data Wrappers
Languages
Publications
Schemas
Subscriptions
postgres
Login/Group Roles
Tablespaces
Rockbuster/postgres@PostgreSQL 13
Query Editor Query History
Scratch Pad
1 SELECT * FROM payment LIMIT 10;
2
Data Output Explain Messages Notifications
payment_id [PK] integer
customer_id smallint
staff_id smallint
rental_id integer
amount numeric (5,2)
payment_date timestamp without time zone
1 17503 341 2 1520 7.99 2007-02-15 22:25:46.996577
2 17504 341 1 1778 1.99 2007-02-16 17:23:14.996577
3 17505 341 1 1849 7.99 2007-02-16 22:41:45.996577
4 17506 341 2 2829 2.99 2007-02-19 19:39:56.996577
5 17507 341 2 3130 7.99 2007-02-20 17:31:48.996577
6 17508 341 1 3382 5.99 2007-02-21 12:33:49.996577
7 17509 342 2 2190 5.99 2007-02-17 23:58:17.996577
8 17510 342 1 2914 5.99 2007-02-20 02:11:44.996577
9 17511 342 1 3081 2.99 2007-02-20 13:57:39.996577


pgAdmin 4
File Object Tools Help
Browser
Dashboard Properties SQL Statistics Dependencies Dependents Rockbuster/po... Rockbuster/po... Rockbuster/postgres@PostgreSQL 13 *
PostgreSQL 13
Databases (2)
Rockbuster
Casts
Catalogs
Event Triggers
Extensions
Foreign Data Wrappers
Languages
Publications
Schemas (1)
public
Collations
Domains
FTS Configurations
FTS Dictionaries
FTS Parsers
FTS Templates
Foreign Tables
Functions
Materialized Views
Procedures
Sequences
Tables (15)
Trigger Functions
Types
Views
Subscriptions
postgres
Login/Group Roles
Tablespaces
Rockbuster/postgres@PostgreSQL 13
Query Editor Query History
Scratch Pad
1 SELECT * FROM information_schema.tables
2 WHERE table_schema = 'public'
3 AND table_type = 'BASE TABLE'
Data Output Explain Messages Notifications
table_catalog name
table_schema name
table_name name
table_type character varying
self_referencing_column_name name
reference_generation character varying
user_defined_type_catalog name
user_defined_type_schema name
1 Rockbuster public actor BASE TABLE [null] [null] [null] [null] [null]
2 Rockbuster public store BASE TABLE [null] [null] [null] [null] [null]
3 Rockbuster public address BASE TABLE [null] [null] [null] [null] [null]
4 Rockbuster public category BASE TABLE [null] [null] [null] [null] [null]
5 Rockbuster public city BASE TABLE [null] [null] [null] [null] [null]
6 Rockbuster public country BASE TABLE [null] [null] [null] [null] [null]
7 Rockbuster public customer BASE TABLE [null] [null] [null] [null] [null]
8 Rockbuster public film_actor BASE TABLE [null] [null] [null] [null] [null]
9 Rockbuster public film_category BASE TABLE [null] [null] [null] [null] [null]



- There is no “table_name” column after selecting from payment
- Tables available: actor, store, address, category, city, country, customer, film_actor, film_category, inventory, language, rental, staff, payment, film
- You can also find the tables under: “Schemas”, “public”, and “Tables”.

Step_4:

OLAP will be interesting to analysts if there is any complains about the product to give a better service.

OTLP will be interesting for Finance department to tract the client interactions, if they buy or rent.

Step_5:
This Invoice contains both, structured and unstructured data. It is probably organized in rows and columns, but we cannot see properly the columns and rows.

Invoice Number	Item	Qty	Description	Price	Subtotal	Recipient address	Sender address	Recipient	Sender	Account Name:	Account NO
2019001	001	01	New video collection Licensing	730 $	730$	40 sheila LA Sparks, NV	4826 Norma Avenue Anderson TX	MR Timothy Walker	Oaklanders	Miko Santo	4929 3310 0057 5422