

T 3.1 Intro to Relational Databases

Step 2-b

A screenshot of Microsoft Excel showing a filtered list of actors from a CSV file named 'actor.csv'. The filter dialog is open, showing a search term 'Ed' and the 'Auto Apply' checkbox checked. The results show three rows where 'first_name' is 'Ed': 1. actor_id: 1, first_name: Ed, last_name: Chase; 2. actor_id: 136, first_name: Ed, last_name: Mansfield; 3. actor_id: 179, first_name: Ed, last_name: Guiness.

actor_id	first_name	last_name
1	Ed	Chase
136	Ed	Mansfield
179	Ed	Guiness

Step 2-c

A screenshot of pgAdmin 4 connected to a PostgreSQL database named 'Rockbuster'. A query is run to count the number of actors with the first name 'Ed':

```
SELECT COUNT(*)
FROM actor
WHERE first_name = 'Ed'
```

The result shows a single row with a count of 3.

count
3

Step 2-d

Both were easy, and the result was the same.

Step 3-a

The screenshot shows the pgAdmin 4 interface. On the left, there's a sidebar with a 'CF' logo and various course navigation links. The main area shows a database browser for 'Rockbuster'. A query window is open with the following SQL code:

```
1 SELECT * FROM payment LIMIT 10;
```

The results table shows 10 rows of data from the 'payment' table, ordered by payment_id. The columns are: payment_id, customer_id, staff_id, rental_id, amount, and payment_date. The data includes various transaction details like rental IDs 1520, 1778, 1849, etc., and payment amounts ranging from 7.99 to 4.99.

Step 3-b

The screenshot shows the pgAdmin 4 interface. The sidebar is identical to the previous one. The main area shows a query window with the following SQL code:

```
1 SELECT * FROM information_schema.tables
2 WHERE table_schema = 'public'
3 AND table_type = 'BASE TABLE'
```

The results table shows 15 rows of data from the 'information_schema.tables' catalog, grouped by table_catalog and table_schema. The table_name column lists the names of the tables in the 'public' schema, such as actor, store, address, category, city, country, customer, film, film_actor, film_category, inventory, language, rental, staff, and payment.

Step 3-c

Database-Rockbuster-Schemas-Tables

Step 3-d

The screenshot shows the pgAdmin 4 interface on a Mac OS X desktop. The main window displays a query results grid. The query is:

```
1 SELECT rental_duration AS "rented for (in days)", COUNT
2   FROM film
3   GROUP BY 1
4   ORDER BY 2
```

The results show the count of films for each rental duration:

rented for (in days)	number of films
1	7
2	5
3	4
4	3
5	212

The pgAdmin interface includes a sidebar with databases like PostgreSQL 14, Rockbuster, and postgres. The status bar at the bottom indicates "Query complete 00:00:00.081".

Step 4

OLAP- Data analysts may use to know the most profitable movie or the most profitable days, weeks, and months of the year.

OLTP- Staff who take care of the customer information or report daily sales of the movies.

Step 5

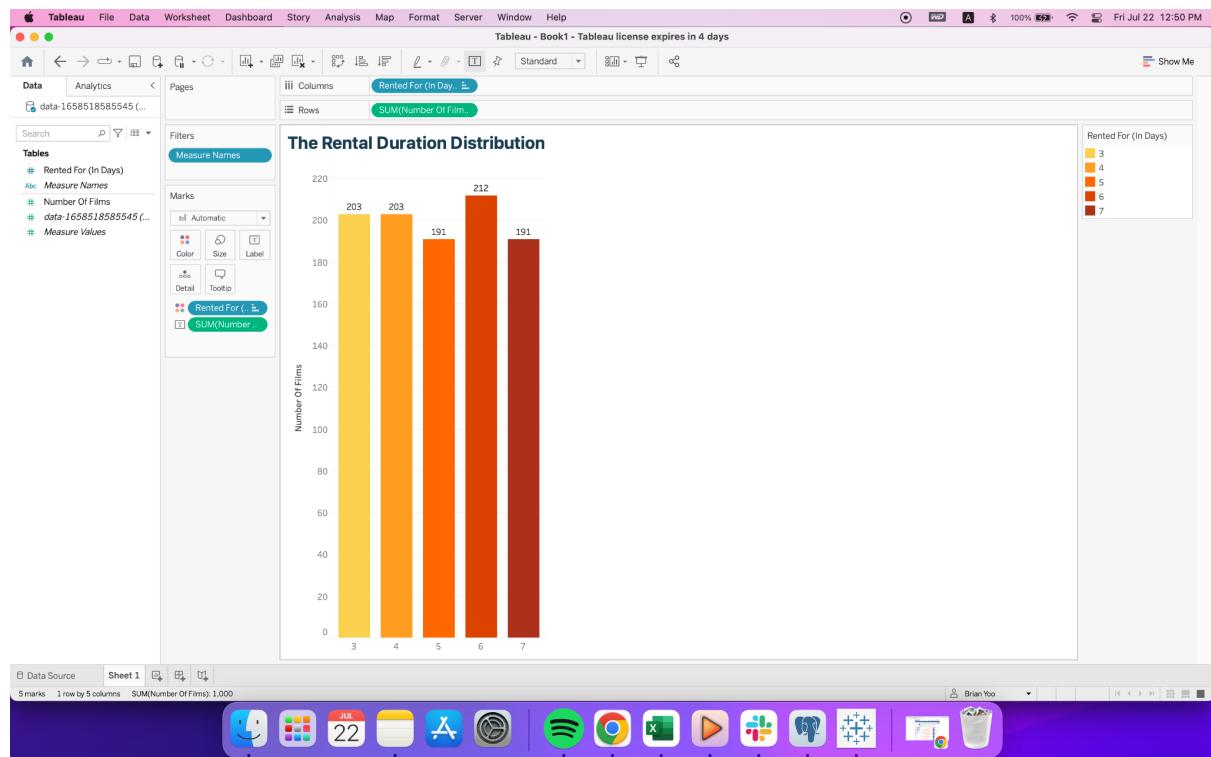
This is structured data so it can be described in a table.

Invoice Number	Item Number	Quantity	Description	Price
2019001	001	01	New Video Collection Licensing	\$750

Customer Name	Timothy Walker
Address	40 sheila La
City	Sparks
State	NV

Supplier	Oaklanders
Account Name	Miko Santo
Account No.	4929 3310 0057 5422
Address	4826 Norma Ave
City	Anderson
State	TX

Bonus



https://public.tableau.com/views/T3_1Bonus/Sheet1?:language=ko-KR&:display_count=n&:origin=viz_share_link