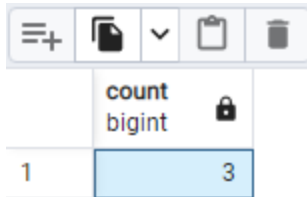


## Task 3.1 – Intro to Relational Databases

**2a.** In the excel document, there are 3 counts of 'Ed'.

**2b.**



count	bigint
1	3

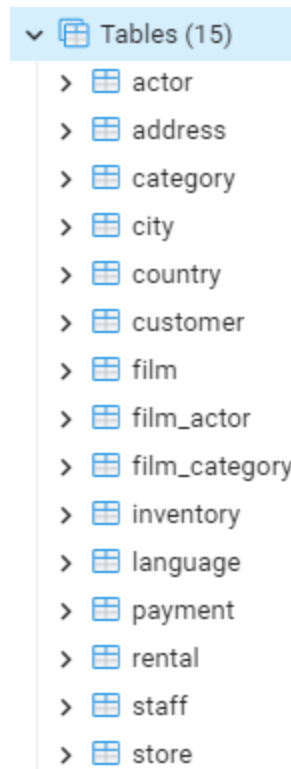
Explanation: I personally prefer the SQL statement as SQL will be able to handle much larger datasets compared to Excel. Since this is a relatively small dataset, it was easy to figure out. But SQL overall will be much more efficient and quicker.

**3a.** The names of the columns are:

- **payment\_id**
- **customer\_id**
- **staff\_id**
- **rental\_id**
- **amount**
- **payment\_date**

**3b.** Another way to list all the table names is to go into Rockbuster → Schemas →

Tables



Tables (15)
> actor
> address
> category
> city
> country
> customer
> film
> film_actor
> film_category
> inventory
> language
> payment
> rental
> staff
> store

**3c.** The greatest number of films were rented out for 6 days

	rented for (in days) smallint	number of films bigint
1	7	191
2	5	191
3	4	203
4	3	203
5	6	212

**4a.**

**OLAP system:** Customer analysis (seeing what customers like/dislike) and the marketing team (observing if their strategies are working or not)

**OLTP system:** Finance (budgeting and expenses) and retail (profits/losses based on sales)

**5a.** The invoice contains structured data because although it is not in table format, the middle section is like a table with rows and columns. The data aligns with the columns, and it is not confusing to understand.

Customer Information				
LAST NAME	FIRST NAME	ADDRESS	CITY	STATE
Walker	Timothy	40 Sheila La	Sparks	Nevada

Transaction Information				
INVOICE #	ITEM #	QUANTITY	DESCRIPTION	PRICE
2019001	001	1	New Video Collection Licensing	\$730

Merchant Information					
MERCHANT	ACCOUNT NAME	ACCOUNT #	ADDRESS	CITY	State
Oaklanders Sound Studio	Miko Santo	4929 310 0057 5422	4826 Norma Avenue	Anderson	Texas