

Task 3.1 Jada Myrie

COUNTIF(B1:B201,"Ed")

Results = 3

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

	count bigint
1	3

The results from Excel and SQL are the same.

I found it easier to use SQL. This is because in SQL it eliminated having to input a data range manually and it also provided the result while displaying the function. This makes it easier to identify which function was used. In excel the function doesn't display only the result.

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

payment_id [PK] integer	customer_id smallint	staff_id smallint	rental_id integer	amount numeric (5,2)	payment_date timestamp without time zone
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The names of the columns are payment id, customer id, rental id, amount, and payment date.

Another way to locate the tables in the database id by:

Database>Schemas>Public>Tables

```
SELECT rental_duration AS "rented for (in days)", COUNT(*) AS "number of films"  
  FROM film  
 GROUP BY 1  
 ORDER BY 2
```

5	6	212
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Most films are rented for 6 days.

OLAP

1. The first way the rental company can use the Online Analytical Process is by accessing past rental records. This would allow them to use data for forecasting and predicting reasons.
2. The second way is by the manipulation of the data to allow the company to determine which movies are the best sellers and should be stocked online.

OLTP

1. The first way is by monitoring payment transactions. Online Transactional processes can be used to store which payment methods customers use and payment processes and information and even refunds.
2. The second way is by updating the storeroom when new stock arrives or when the stock leaves.
3. Does the invoice contain structured or unstructured data? Write an explanation for your answer.

The invoice is semi-structured. The table is not unstructured like a survey answers. It contains labels and headings breaking down the information into rows and it is very organized.

4. Organize and store the information on the invoice in a database. Step one will be to create a table in the text document you've started (you can insert a table if you're using MS Word or Google Docs, for example). Make sure your table contains columns with the appropriate labels, as well as the values from the invoice in each column. You're focusing, here, on a high-level structuring of your data.

Customer Record Table

Invoice #	First_name	Last_name	Address	City	State	Item	Quantity	Payment
2019005	Timothy	Walker	40 Sheila La	Sparks	NV	001	01	730

Inventory Table

Item	Price	Description
001	730	New Video Collection Licensing