2) **Drawing on what you've learned in previous Achievements, use the appropriate functions in Excel to count all the actors whose first name is "Ed." Write down the result in a text document.**

Three actors are named "Ed"

Copy the result that tells you the number of times the first name "Ed" appears in the "actor" table from the Data Output window into your text document from step 2b. Check that your answer matches your answer from step 2a. Was it easier to use Excel or the SQL statement and database to count the number of "Eds"? Provide an explanation for your answer in the same text document.

SQL came back with 3 as well. SQL definitely found the answer faster, but having more experience with Excel, I found it easier to know what to do and just filter it down. Since there were only 3 answers, it was not hard to count them or look at the bottom and see what the cell counter gave. However, if there were thousands of answers, SQL would've been better to just plug in the lines of code and get the results.

3) **Execute the following query and list the names of the columns in the payment table.**

SELECT * FROM payment LIMIT 10;

Payment_id, customer_id, staff_id, rental_id, amount, payment_date

Under the "table_name" column, what are the names of the tables that are available in the Rockbuster database? (List all names.)

Actor, Store, Address, category, city, country, customer, film_actor, film_category, inventory, language, rental, staff, payment, film

Within the pgAdmin 4 console, can you think of another way to list all the table names in the database instead of the SQL statement above?

```
SELECT table_name
FROM information_schema.tables
WHERE table_type='BASE TABLE'
AND table_schema='public';
```

Analyze the rental duration distribution. How many days are most films rented for?

Six Days

4)Think about who in Rockbuster Stealth might want to use an OLAP or OLTP system for their data needs; for example, the sales department, which is interested in sales trends, would likely use an OLAP system. Describe at least 2 situations for each type of system.

OLAP could be used by both the sales dept and the accounting to see how much was made off previous sales and to forecast future sales and necessary expendetures. OLTP could be used by the engineering team when adding new titles to the library or updating necessary info for the algorithms.

5) **Does the invoice contain structured or unstructured data? Write an explanation for your answer.**

The invoice appears to contain structured data in the sense that there's a templet for the invoice and its clear the info that would go into a table could be easily put into a table. Its unstructured in that is an invoice and not already in a table format, but I'm leaning more structured than unstructured

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.

Invoice	Item	QTY	Description	Price
2019001	1	1	New Video Collection Licensing	$730