

Assignment 4: DVD Rental Queries

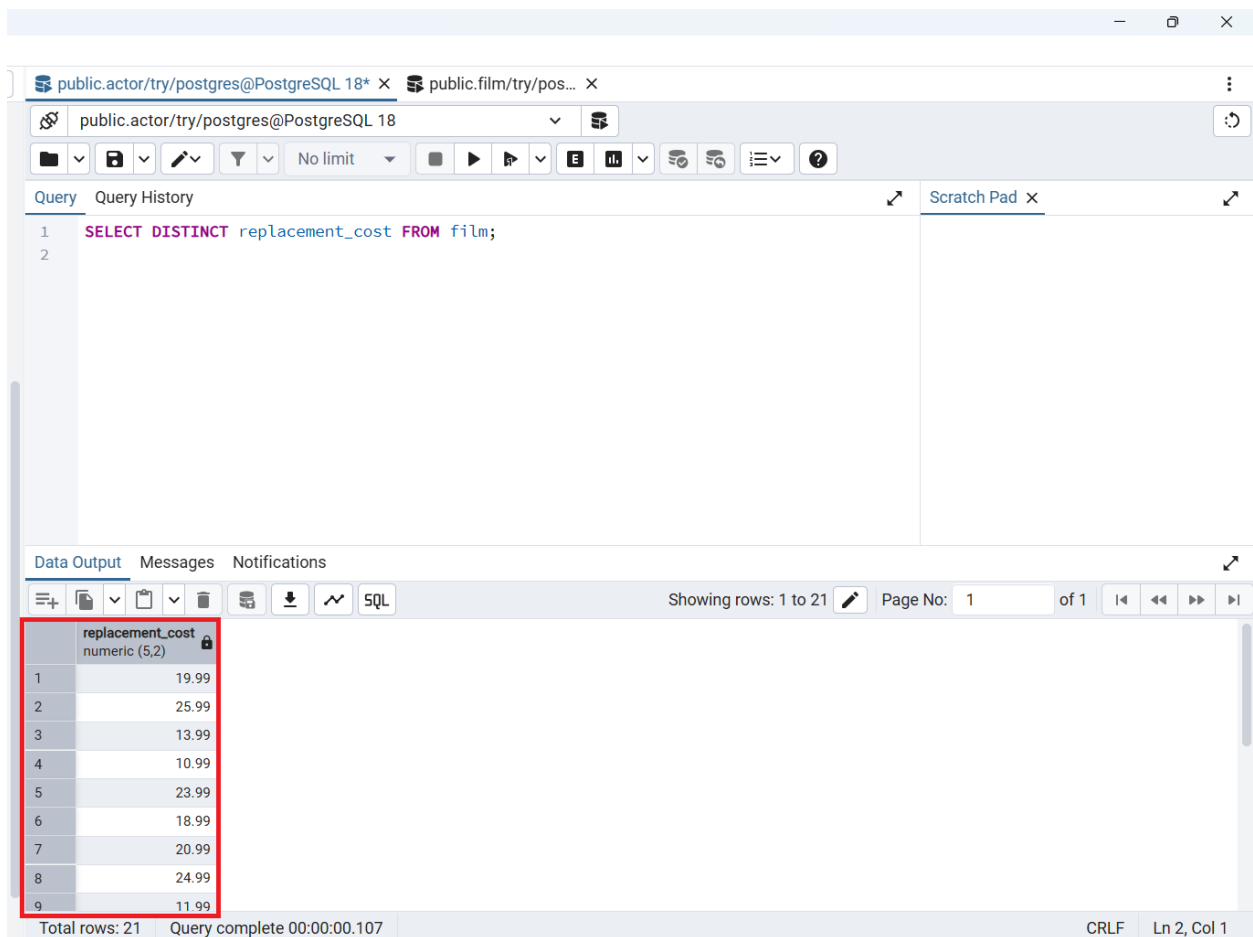
This assignment focuses on practicing basic SQL queries on the DVD Rental database.

The main topics include retrieving distinct values, counting entries, filtering data, and applying multiple conditions.

These exercises help improve understanding of data querying, conditional logic, and aggregate functions in SQL.

Query 1:

Description: Retrieve all distinct values from the replacement_cost column in the film table. This query focuses on identifying and listing unique data entries.



The screenshot shows a PostgreSQL query editor interface. The query entered is:

```
1 SELECT DISTINCT replacement_cost FROM film;
```

The results are displayed in a table with the following data:

replacement_cost numeric (5,2)
19.99
25.99
13.99
10.99
23.99
18.99
20.99
24.99
11.99

The interface also shows the status bar at the bottom: "Total rows: 21", "Query complete 00:00:00.107", "CRLF", and "Ln 2, Col 1".

Query 2:

Description: Count the number of distinct values in the replacement_cost column of the film table. This query focuses on determining how many unique entries exist in a dataset.

The screenshot shows a PostgreSQL query editor interface. The query editor pane contains the following SQL query:

```
1 SELECT COUNT(DISTINCT replacement_cost) FROM film;
2
```

The data output pane shows the result of the query:

	count bigint
1	21

The status bar at the bottom indicates: Total rows: 1, Query complete 00:00:00.089, CRLF, Ln 2, Col 1.

Query 3:

Description: Count the number of films in the film table whose titles start with the letter 'T' and have a rating of 'G'. This query focuses on filtering data using multiple conditions.

The screenshot shows a PostgreSQL query editor interface. The query is as follows:

```
1 SELECT COUNT(*) AS title FROM film
2 WHERE title LIKE 'T%'
3 AND rating = 'G';
4
```

The query is executed, and the results are displayed in the Data Output tab. The results show a single row with the count of 9.

	title
1	9

A red box highlights the first row of the results table.

At the bottom of the interface, a green status bar indicates: "Successfully run. Total query runtime: 173 msec. 1 rows affected."

Below the status bar, the following information is displayed: "Total rows: 1", "Query complete 00:00:00.173", "CRLF", and "Ln 4, Col 1".

Query 4:

Description: Count the number of countries in the country table whose names consist of exactly 5 characters. This query focuses on filtering data based on text length.

The screenshot shows a PostgreSQL query editor interface. The query editor displays the following SQL query:

```
1 SELECT COUNT (*) FROM country
2 WHERE country LIKE '_____';
3
```

The query is executed, and the results are shown in the Data Output pane. The results are as follows:

	count bigint
1	13

The Data Output pane also shows a status message: "Successfully run. Total query runtime: 81 msec. 1 rows affected." The bottom status bar indicates "Total rows: 1" and "Query complete 00:00:00.081".

Query 5:

Description: Count the number of cities in the city table whose names end with the letter 'R' or 'r'. This query focuses on filtering data based on specific text patterns.

The screenshot shows a web-based PostgreSQL query editor interface. At the top, there are tabs for 'public.actor/try/postgres@PostgreSQL 18*' and 'public.film/try/pos...'. Below the tabs is a toolbar with various icons for file operations, query execution, and settings. The main area is divided into 'Query' and 'Query History' tabs. The 'Query' tab contains the following SQL code:

```
1 SELECT COUNT(*) FROM city
2 WHERE city ILIKE '%R';
3
```

To the right of the query editor is a 'Scratch Pad' tab. Below the query editor is a 'Data Output' tab, which is currently active. It shows a single row of results:

	count bigint
1	33

The 'Data Output' tab also includes a toolbar with icons for file operations, query execution, and settings. Below the data output is a status bar that reads 'Showing rows: 1 to 1', 'Page No: 1', and 'of 1'. A green notification box at the bottom right states: '✓ Successfully run. Total query runtime: 117 msec. 1 rows affected. ✕'. The bottom status bar shows 'Total rows: 1', 'Query complete 00:00:00.117', and 'CRLF Ln 3, Col 1'.