

Assignment 3: DVDRental Queries

DVD-Rental Assignment 3:

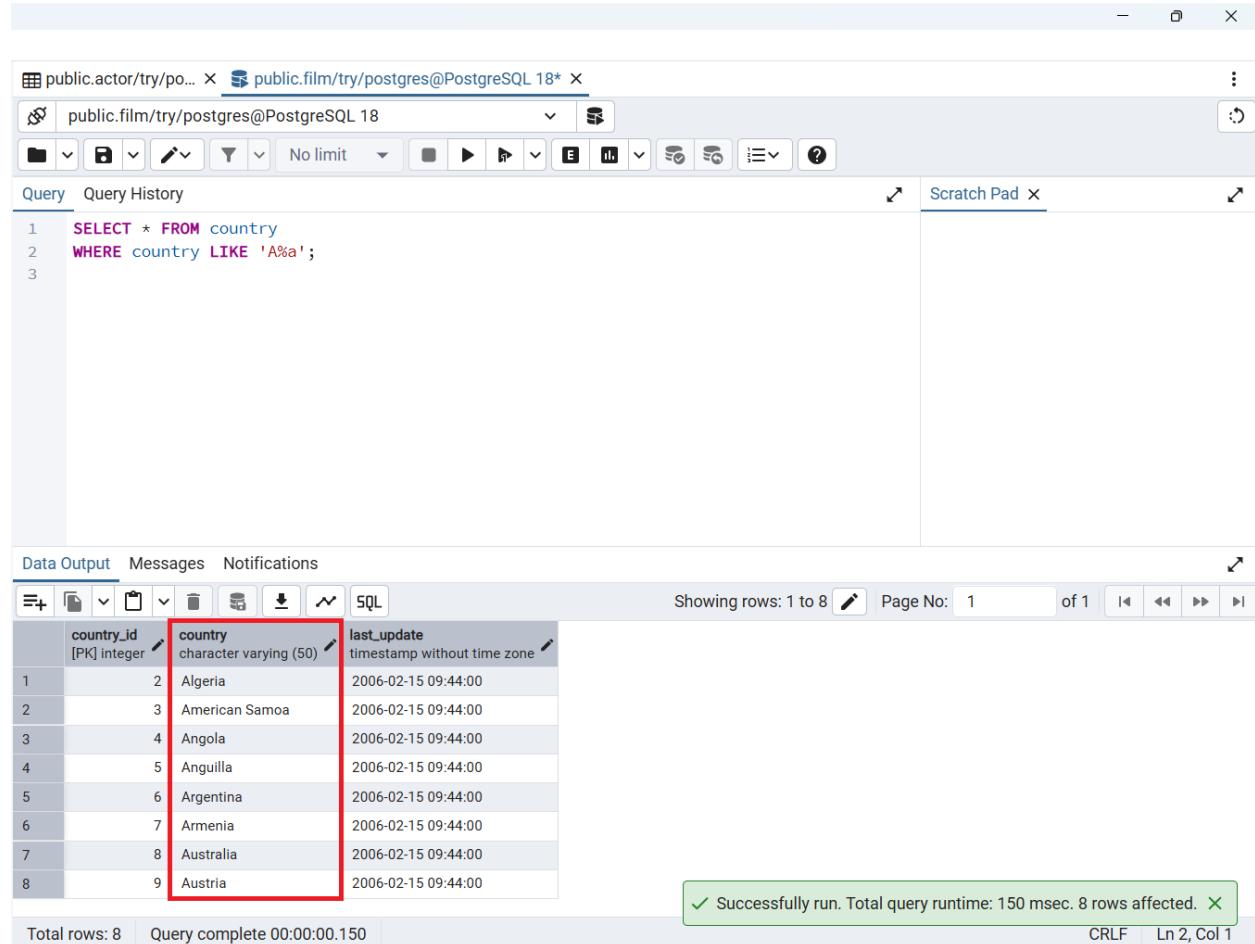
This assignment includes basic PostgreSQL queries on the DVDRental database.

The queries focus on pattern matching using LIKE and ILIKE, filtering text data, and applying multiple conditions.

These exercises help improve understanding of string-based filtering and conditional querying in SQL.

Query 1:

Description: Retrieve all countries whose names start with 'A' and end with 'a'.



The screenshot shows the pgAdmin 4 interface with a single query window. The query is:

```
1 SELECT * FROM country
2 WHERE country LIKE 'A%a';
3
```

The results table displays 8 rows of data:

country_id	country	last_update
1	Algeria	2006-02-15 09:44:00
2	American Samoa	2006-02-15 09:44:00
3	Angola	2006-02-15 09:44:00
4	Anguilla	2006-02-15 09:44:00
5	Argentina	2006-02-15 09:44:00
6	Armenia	2006-02-15 09:44:00
7	Australia	2006-02-15 09:44:00
8	Austria	2006-02-15 09:44:00

A green success message at the bottom right indicates: "Successfully run. Total query runtime: 150 msec. 8 rows affected.".

Query 2:

Description: Retrieve all countries with at least 6 characters and names ending with 'n'.

The screenshot shows a PostgreSQL client interface with two tabs: 'public.actor/try/po...' and 'public.film/try/postgres@PostgreSQL 18*'. The active tab displays a SQL query and its results.

Query Tab:

```
1 SELECT * FROM country
2 WHERE LENGTH(country) >= 6
3 AND country LIKE '%n';
4
```

Data Output Tab:

	country_id	country	last_update
1	1	Afghanistan	2006-02-15 09:44:00
2	10	Azerbaijan	2006-02-15 09:44:00
3	11	Bahrain	2006-02-15 09:44:00
4	19	Cameroon	2006-02-15 09:44:00
5	51	Kazakstan	2006-02-15 09:44:00
6	55	Liechtenstein	2006-02-15 09:44:00
7	72	Pakistan	2006-02-15 09:44:00
8	79	Runion	2006-02-15 09:44:00
9	80	Russian Federation	2006-02-15 09:44:00

Total rows: 12 Query complete 00:00:00.084 CRLF Ln 4, Col 1

Query 3:

Description: Retrieve all films whose titles contain at least 4 occurrences of the letter 'T', case insensitive.

The screenshot shows the pgAdmin 4 interface with two tabs open: 'public.actor/try/po...' and 'public.film/try/postgres@PostgreSQL 18*'. The 'public.film' tab is active, showing a query window with the following SQL code:

```
1 SELECT * FROM film
2 WHERE title ILIKE '%T%T%T%T%';
```

Below the query window is a data grid titled 'Data Output' displaying the results of the query. The results show 9 rows of film data, with the first row ('Antitrust Tomatoes') highlighted by a red box. The columns and their data types are:

	film_id	title	description	release_date	language	rental_duration	rental_rate	length	replacement_cost	rating	mpaa_rating
1	29	Antitrust Tomatoes	A Fa...	2006	1	5	2.99	168	11.99	NC-17	
2	45	Attraction Newton	A A...	2006	1	5	4.99	83	14.99	PG-13	
3	224	Desperate Trainspotting	A Ep...	2006	1	7	4.99	81	29.99	G	
4	287	Entrapment Satisfaction	A Th...	2006	1	5	0.99	176	19.99	R	
5	405	Haunted Antitrust	A A...	2006	1	6	4.99	76	13.99	NC-17	
6	693	Potter Connecticut	A Th...	2006	1	5	2.99	115	16.99	PG	
7	856	Streetcar Intentions	A In...	2006	1	5	4.99	73	11.99	R	
8	881	Temple Attraction	A A...	2006	1	5	4.99	71	13.99	PG	

At the bottom of the interface, it says 'Total rows: 9' and 'Query complete 00:00:00.148'.

Query 4:

Retrieve all films with titles starting with 'C', length **greater than or equal to 90**, and rental rate **equal to 2.99**.

The screenshot shows the pgAdmin 4 interface with a query editor and a data output viewer.

Query Editor:

```
public.actor/try/postgres@PostgreSQL 18* public.film/try/postgres@PostgreSQL 18
SELECT * FROM film
WHERE title LIKE 'C%'
AND length >= 90
AND rental_rate = 2.99;
```

Data Output:

	film_id	title	description	release_date	language	rental_duration	rental_rate	length	replacement_cost	rating
1	115	Campus Remember	A A...	2006	1	5	2.99	167	27.99	R
2	121	Carol Texas	A A...	2006	1	4	2.99	151	15.99	PG
3	129	Cause Date	A Ta...	2006	1	3	2.99	179	16.99	R
4	136	Chaplin License	A B...	2006	1	7	2.99	146	26.99	NC-17
5	146	Chitty Lock	A B...	2006	1	6	2.99	107	24.99	G
6	148	Chocolate Duck	A U...	2006	1	3	2.99	132	13.99	R
7	150	Cider Desire	A St...	2006	1	7	2.99	101	9.99	PG
8	152	Circus Youth	A Th...	2006	1	5	2.99	90	13.99	PG-13