

## Assignment 3: DVD Rental Queries

### DVD-Rental Assignment 3:

This assignment includes basic PostgreSQL queries on the DVD Rental 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 a PostgreSQL query editor interface. The query entered is:

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

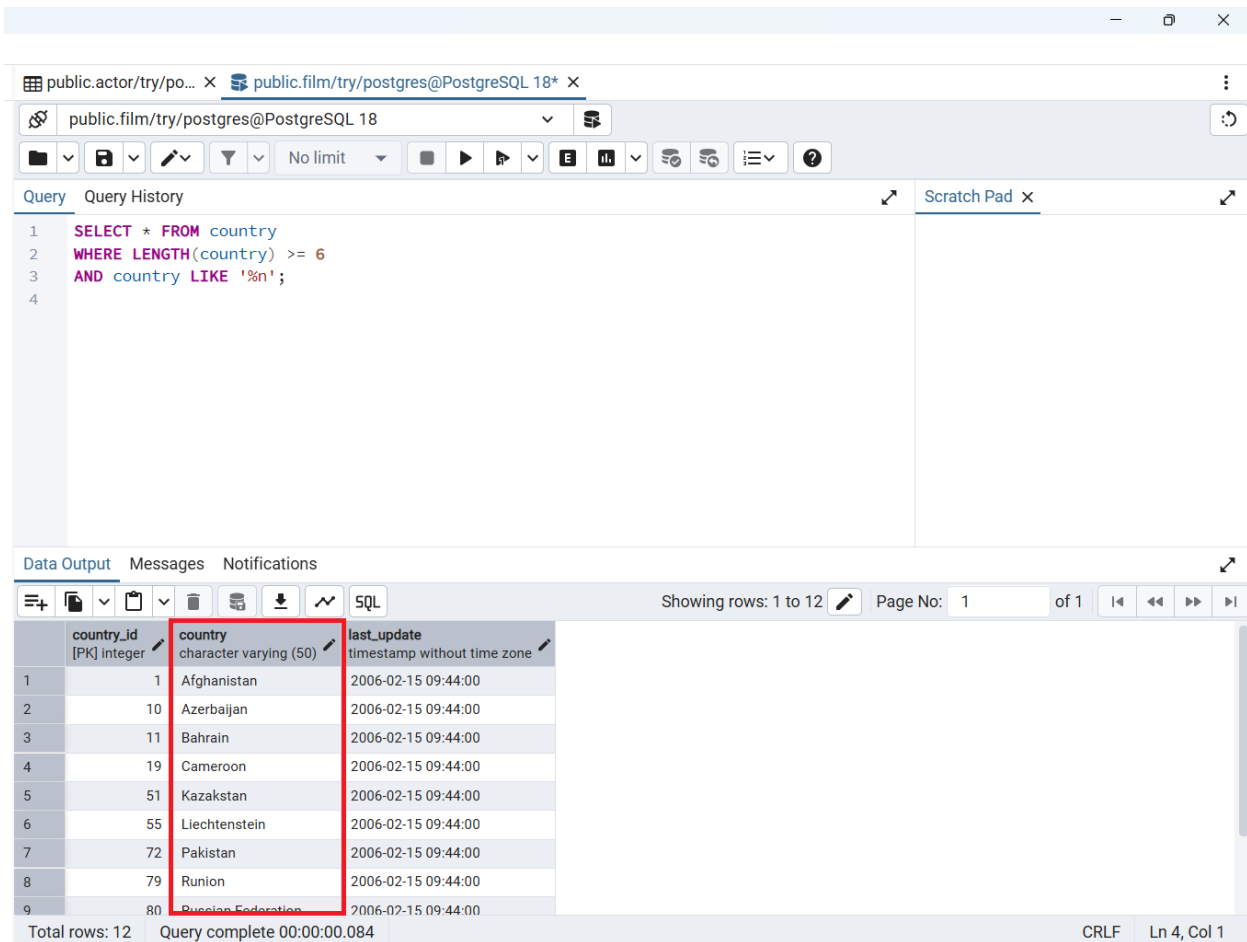
The query has been executed successfully, resulting in 8 rows of data. The results are displayed in a table with the following columns: country\_id [PK] integer, country character varying (50), and last\_update timestamp without time zone. The countries listed are: Algeria, American Samoa, Angola, Anguilla, Argentina, Armenia, Australia, and Austria. A red box highlights the 'country' column and its values.

country_id [PK] integer	country character varying (50)	last_update timestamp without time zone
2	Algeria	2006-02-15 09:44:00
3	American Samoa	2006-02-15 09:44:00
4	Angola	2006-02-15 09:44:00
5	Anguilla	2006-02-15 09:44:00
6	Argentina	2006-02-15 09:44:00
7	Armenia	2006-02-15 09:44:00
8	Australia	2006-02-15 09:44:00
9	Austria	2006-02-15 09:44:00

Below the table, a status message indicates: "Successfully run. Total query runtime: 150 msec. 8 rows affected." The bottom of the interface shows "Total rows: 8" and "Query complete 00:00:00.150".

Query 2:

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



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

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

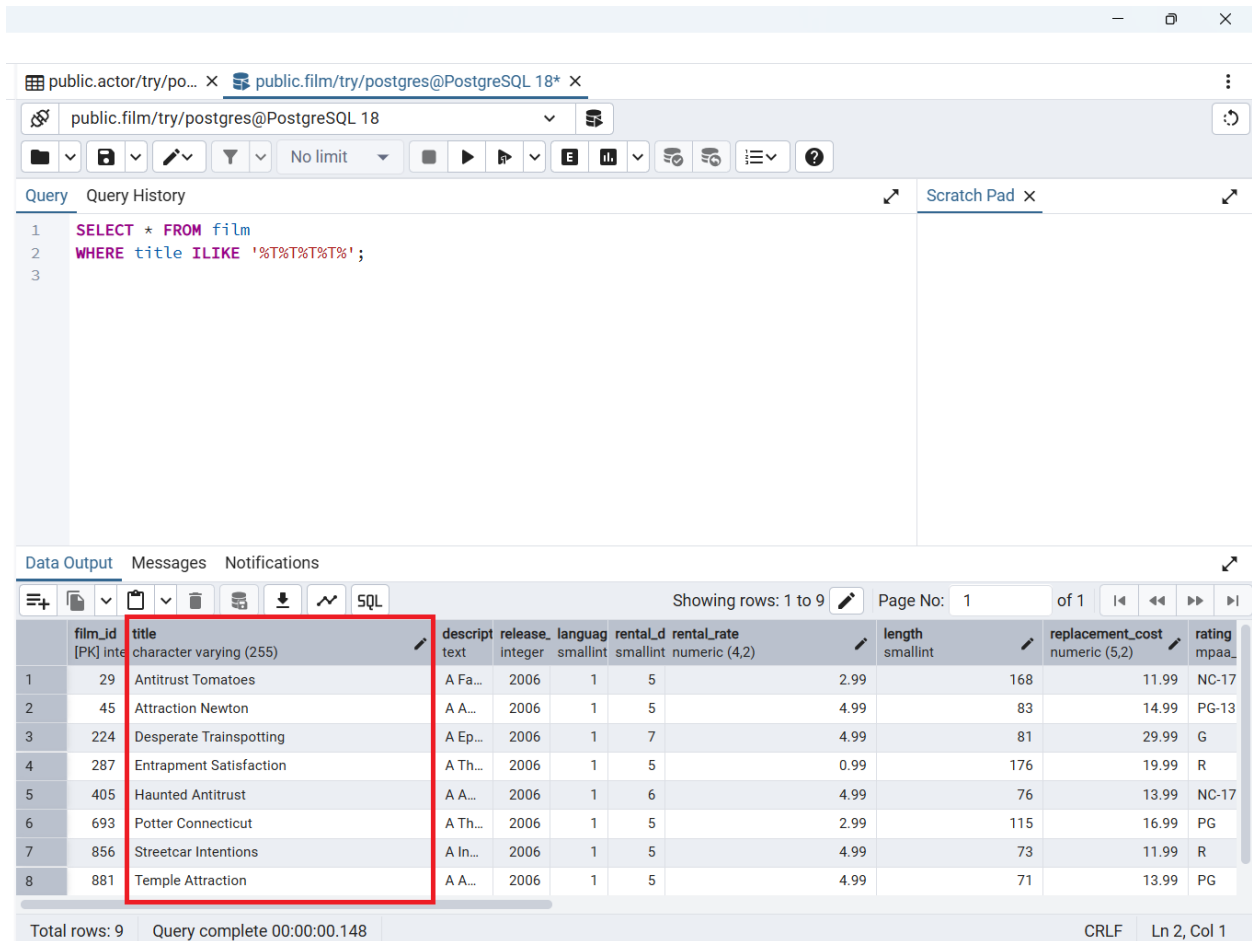
The query is executed, and the results are displayed in a table. The table has three columns: **country\_id** (integer), **country** (character varying (50)), and **last\_update** (timestamp without time zone). The results show 12 rows of data, with the first 9 rows visible in the screenshot. The countries listed are Afghanistan, Azerbaijan, Bahrain, Cameroon, Kazakhstan, Liechtenstein, Pakistan, Runion, and Russian Federation. The last row is partially visible.

	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	Kazakhstan	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 a PostgreSQL query editor interface. The query entered is:

```
1 SELECT * FROM film
2 WHERE title ILIKE '%T%T%T%T%';
3
```

The results are displayed in a table with the following columns: film\_id, title, description, release\_year, language, rental\_duration, rental\_rate, length, replacement\_cost, and rating. The first 8 rows of results are shown, with the 'title' column highlighted by a red box.

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

Total rows: 9 Query complete 00:00:00.148 CRLF Ln 2, Col 1

#### 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 a PostgreSQL query editor interface. The query is as follows:

```
1 SELECT * FROM film
2 WHERE title LIKE 'C%'
3 AND length >= 90
4 AND rental_rate = 2.99;
5
```

The results are displayed in a table with the following columns: film\_id, title, description, release\_year, language, rental\_duration, rental\_rate, length, replacement\_cost, and rating. The results are filtered to show only films with titles starting with 'C', length greater than or equal to 90, and rental rate equal to 2.99.

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

Total rows: 21 | Query complete 00:00:00.129 | CRLF | Ln 4, Col 1