

Assignment 1: DVD Rental Queries

DVD-Rental Assignment 1:

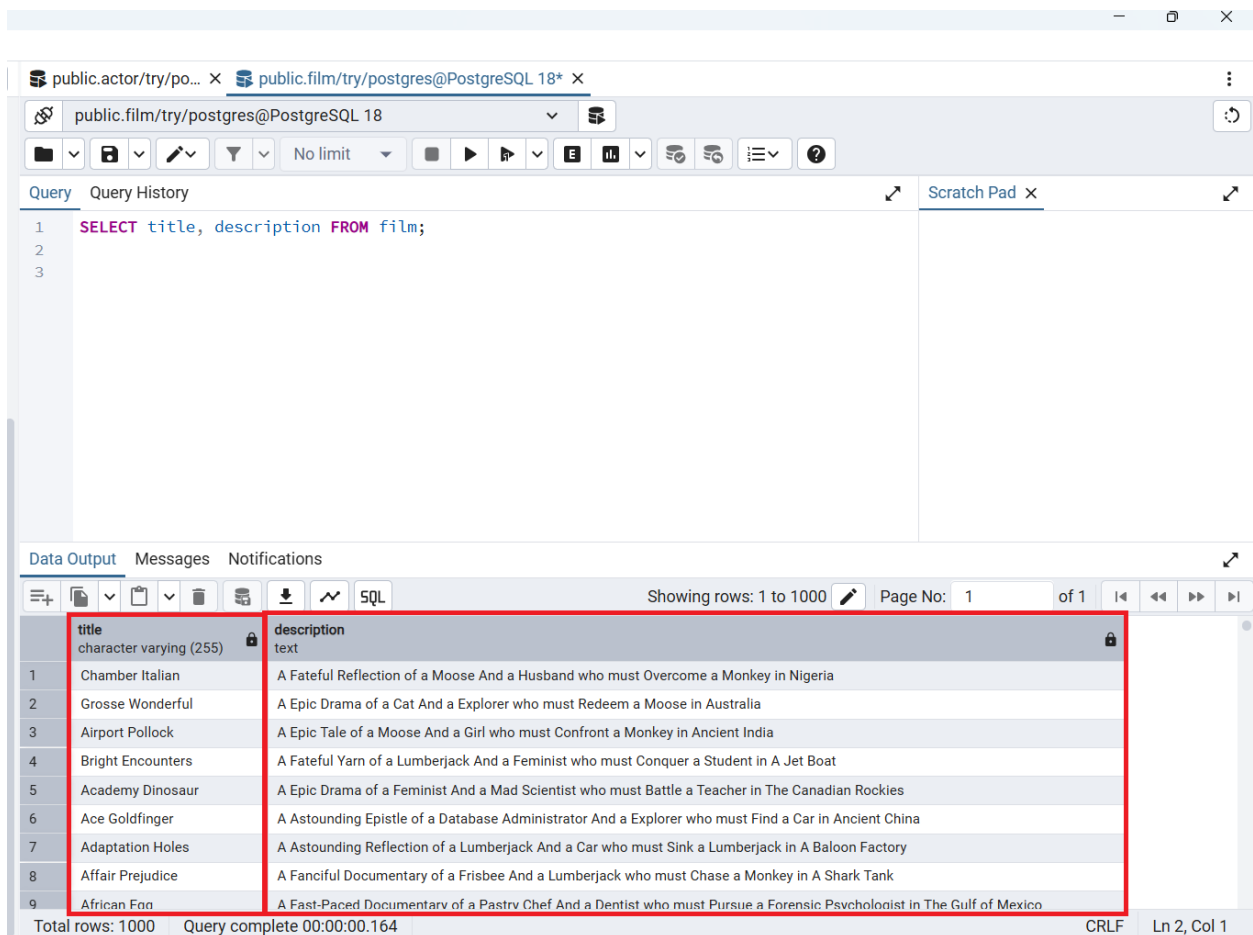
This assignment includes basic PostgreSQL queries on the DVD Rental database.

The queries demonstrate how to retrieve information from the film and customer tables, applying different conditions and filters.

Screenshots of the query results are included below each query.

Query 1:

Description: Retrieve the title and description columns from the film table.



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

```
1 SELECT title, description FROM film;
2
3
```

Below the query editor, the 'Data Output' tab is active, displaying the results of the query. The results are shown in a table with two columns: 'title' and 'description'. The table contains 1000 rows, with the first 9 rows visible in the screenshot. The table is highlighted with a red border.

| | title | description |
|---|-------------------------|---|
| | character varying (255) | text |
| 1 | Chamber Italian | A Fateful Reflection of a Moose And a Husband who must Overcome a Monkey in Nigeria |
| 2 | Grosse Wonderful | A Epic Drama of a Cat And a Explorer who must Redeem a Moose in Australia |
| 3 | Airport Pollock | A Epic Tale of a Moose And a Girl who must Confront a Monkey in Ancient India |
| 4 | Bright Encounters | A Fateful Yarn of a Lumberjack And a Feminist who must Conquer a Student in A Jet Boat |
| 5 | Academy Dinosaur | A Epic Drama of a Feminist And a Mad Scientist who must Battle a Teacher in The Canadian Rockies |
| 6 | Ace Goldfinger | A Astounding Epistle of a Database Administrator And a Explorer who must Find a Car in Ancient China |
| 7 | Adaptation Holes | A Astounding Reflection of a Lumberjack And a Car who must Sink a Lumberjack in A Baloon Factory |
| 8 | Affair Prejudice | A Fanciful Documentary of a Frisbee And a Lumberjack who must Chase a Monkey in A Shark Tank |
| 9 | African Foo | A Fast-Paced Documentarv of a Pastrv Chef And a Dentist who must Pursue a Forensic Psychologist in The Gulf of Mexico |

At the bottom of the table, it says 'Total rows: 1000' and 'Query complete 00:00:00.164'. The status bar at the bottom right shows 'CRLF' and 'Ln 2, Col 1'.

Query 2:

Description: Retrieve all columns from the film table for films with length > 60 and < 75.

The screenshot shows a PostgreSQL query editor interface. The query editor has a tab for 'public.film/try/postgres@PostgreSQL 18'. The query is as follows:

```
1 SELECT * FROM film
2 WHERE length > 60 AND length < 75;
3
4
```

Below the query editor, the 'Data Output' tab is active, showing the results of the query. The results are displayed in a table with 8 rows and 7 columns. The columns are: length (smallint), replacement_cost (numeric (5,2)), rating (mpaa_rating), last_update (timestamp without time zone), special_features (text[]), and fulltext (tsvector). The first 8 rows of the results are shown, with the 'length' column highlighted by a red box.

| | length smallint | replacement_cost numeric (5,2) | rating mpaa_rating | last_update timestamp without time zone | special_features text[] | fulltext tsvector |
|---|--------------------|-----------------------------------|-----------------------|--|---|--|
| 1 | 73 | 12.99 | PG-13 | 2013-05-26 14:50:58.951 | {Trailers} | 'boat':20 'bright':1 'conquer':14 'er |
| 2 | 62 | 28.99 | PG-13 | 2013-05-26 14:50:58.951 | {Trailers,"Deleted Scenes"} | 'airplan':1 'boat':20 'butler':11,16 ' |
| 3 | 63 | 24.99 | NC-17 | 2013-05-26 14:50:58.951 | {Trailers,"Deleted Scenes"} | 'action':5 'action-pack':4 'aladdin': |
| 4 | 74 | 15.99 | G | 2013-05-26 14:50:58.951 | {Trailers} | 'angel':1 'astronaut':11 'battl':14 't |
| 5 | 62 | 29.99 | NC-17 | 2013-05-26 14:50:58.951 | {Commentaries,"Deleted Scenes"} | 'arabia':1 'cow':12 'defeat':15 'dog |
| 6 | 68 | 25.99 | NC-17 | 2013-05-26 14:50:58.951 | {Trailers,Commentaries,"Deleted Scenes","Behind the Scen... | 'ark':1 'beauti':4 'desert':20 'explor |
| 7 | 65 | 27.99 | G | 2013-05-26 14:50:58.951 | { "Behind the Scenes" } | 'awe':5 'awe-inspir':4 'barbarella':1 |
| 8 | 73 | 21.99 | PG | 2013-05-26 14:50:58.951 | {Trailers,"Deleted Scenes","Behind the Scenes"} | 'abandon':21 'astound':4 'bedazzl' |

Total rows: 104 Query complete 00:00:00.236 CRLF Ln 2, Col 35

Query 3:

Description: Retrieve all columns from the film table where rental_rate = 0.99 and replacement_cost = 12.99 or 28.99.

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

```
1 SELECT * FROM film
2 WHERE rental_rate = 0.99
3 AND (replacement_cost = 12.99 OR replacement_cost = 28.99);
4
5
```

The results are displayed in a table with 8 rows. The columns are: rental_rate, length, replacement_cost, rating, last_update, special_features, and fulltext. The first two columns, rental_rate and replacement_cost, are highlighted with red boxes in the original image.

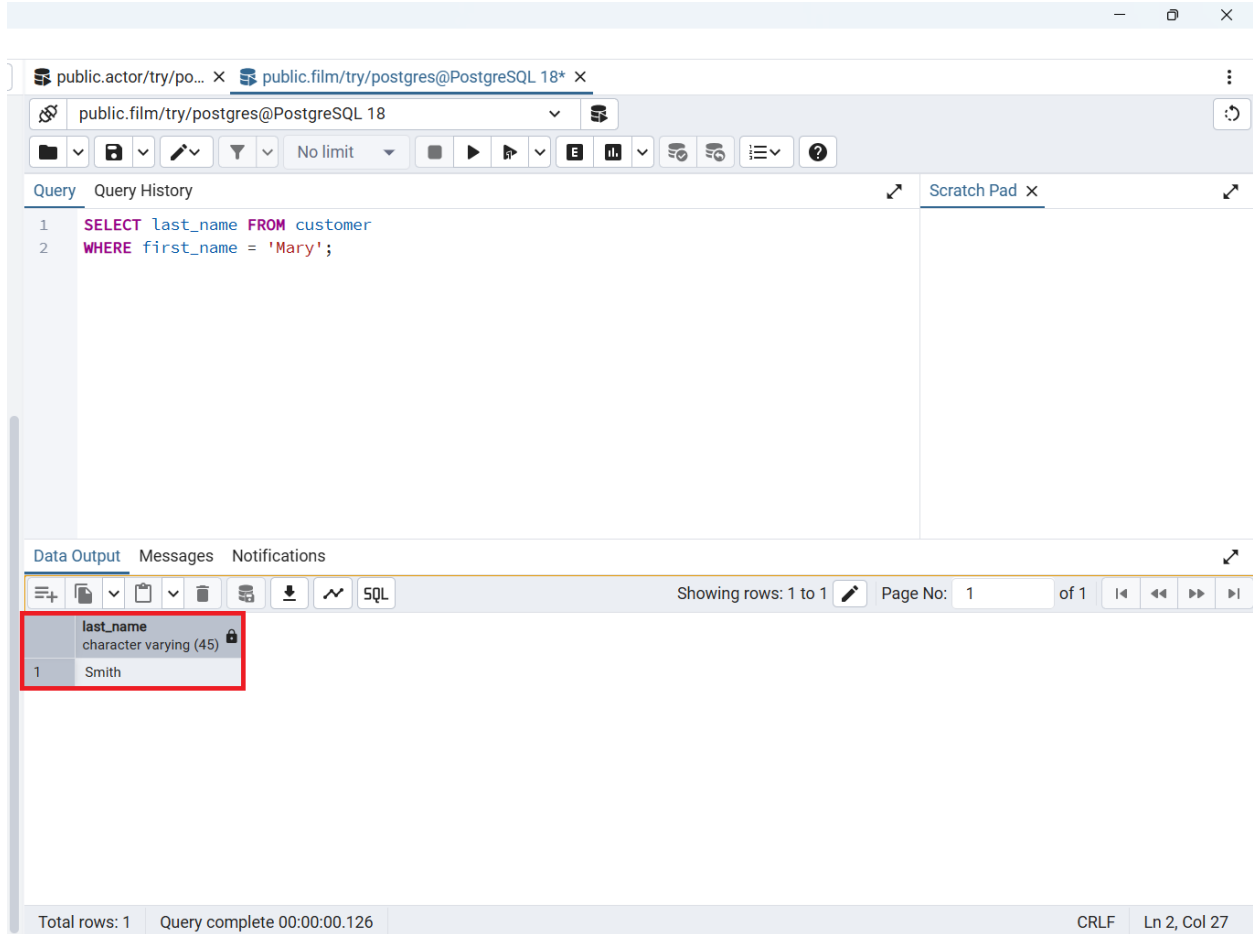
| | rental_rate numeric (4,2) | length smallint | replacement_cost numeric (5,2) | rating mpaa_rating | last_update timestamp without time zone | special_features text[] | fulltext tsvector |
|---|------------------------------|--------------------|-----------------------------------|-----------------------|--|---|----------------------|
| 1 | 0.99 | 179 | 12.99 | NC-17 | 2013-05-26 14:50:58.951 | { "Deleted Scenes", "Behind the Scenes" } | 'administr':9,18 |
| 2 | 0.99 | 127 | 12.99 | PG-13 | 2013-05-26 14:50:58.951 | { Trailers, Commentaries } | 'abandon':20 'ar |
| 3 | 0.99 | 65 | 12.99 | PG-13 | 2013-05-26 14:50:58.951 | { Trailers, "Deleted Scenes" } | 'boat':21 'club': |
| 4 | 0.99 | 177 | 28.99 | R | 2013-05-26 14:50:58.951 | { Trailers, "Deleted Scenes", "Behind the Scenes" } | 'challeng':14 'dc |
| 5 | 0.99 | 104 | 12.99 | PG-13 | 2013-05-26 14:50:58.951 | { Trailers, "Deleted Scenes" } | 'australia':18 'dc |
| 6 | 0.99 | 178 | 28.99 | PG-13 | 2013-05-26 14:50:58.951 | { "Deleted Scenes" } | 'boat':8 'fight':1 |
| 7 | 0.99 | 54 | 12.99 | R | 2013-05-26 14:50:58.951 | { Trailers } | 'administr':14 't |
| 8 | 0.99 | 108 | 28.99 | R | 2013-05-26 14:50:58.951 | { Commentaries, "Deleted Scenes", "Behind the Scenes" } | 'beauti':4 'boon |

Total rows: 37 Query complete 00:00:00.129 CRLF Ln 4, Col 1

Query 4:

Description: Retrieve the last_name of the customer whose first_name = 'Mary'.

Answer: Smith



The screenshot shows a web-based PostgreSQL query editor interface. The browser tabs include 'public.actor/try/po...' and 'public.film/try/postgres@PostgreSQL 18*'. The address bar shows 'public.film/try/postgres@PostgreSQL 18'. The query editor has a toolbar with various icons for file operations, execution, and settings. The query input area contains the following SQL query:

```
1 SELECT last_name FROM customer
2 WHERE first_name = 'Mary';
```

The 'Data Output' tab is active, showing a table with one row. The first column is labeled 'last_name' with a data type of 'character varying (45)'. The value in the row is 'Smith'.

| | last_name character varying (45) |
|---|-------------------------------------|
| 1 | Smith |

The status bar at the bottom indicates 'Total rows: 1', 'Query complete 00:00:00.126', and 'Ln 2, Col 27'.

Query 5:

Description: Retrieve all columns from the film table where length ≤ 50 and rental_rate is not 2.99 or 4.99.

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

```
1 SELECT * FROM film
2 WHERE length <= 50 AND (NOT rental_rate = 2.99 AND NOT rental_rate = 4.99);
```

The results are displayed in a table with the following columns: rental_rate (numeric (4,2)), length (smallint), replacement_cost (numeric (5,2)), rating (mpaa_rating), last_update (timestamp without time zone), special_features (text[]), and fulltext (tsvector). The first 8 rows are visible, with the first two columns highlighted by a red box.

| | rental_rate numeric (4,2) | length smallint | replacement_cost numeric (5,2) | rating mpaa_rating | last_update timestamp without time zone | special_features text[] | fulltext tsvector |
|---|------------------------------|--------------------|-----------------------------------|-----------------------|--|---|---------------------------|
| 1 | 0.99 | 47 | 19.99 | G | 2013-05-26 14:50:58.951 | {Trailers,Commentaries,"Deleted Scenes"} | 'chef':9 'desert':22 'dow |
| 2 | 0.99 | 47 | 12.99 | PG-13 | 2013-05-26 14:50:58.951 | { "Behind the Scenes" } | 'action':5 'action-pack': |
| 3 | 0.99 | 49 | 23.99 | G | 2013-05-26 14:50:58.951 | {Trailers,Commentaries,"Behind the Scenes"} | 'australia':18 'boy':8,16 |
| 4 | 0.99 | 46 | 25.99 | PG-13 | 2013-05-26 14:50:58.951 | {Trailers,Commentaries} | 'amaz':4 'car':8,16 'drar |
| 5 | 0.99 | 48 | 20.99 | PG | 2013-05-26 14:50:58.951 | { "Deleted Scenes" } | 'australia':18 'challeng' |
| 6 | 0.99 | 50 | 13.99 | PG | 2013-05-26 14:50:58.951 | {Trailers,"Deleted Scenes"} | 'ancient':20 'cat':12 'ch |
| 7 | 0.99 | 50 | 24.99 | PG-13 | 2013-05-26 14:50:58.951 | {Commentaries,"Deleted Scenes"} | 'baloon':22 'car':19 'def |
| 8 | 0.99 | 48 | 19.99 | PG-13 | 2013-05-26 14:50:58.951 | {Trailers,Commentaries} | 'butler':8 'canadian':19 |

Total rows: 13 Query complete 00:00:00.268 CRLF Ln 2, Col 76