CS3120 Database Management Systems Laboratory

Lab 2

Mayank Singla
111901030

```
CREATE DATABASE dvdrental;
```

-- Creating the 'dvdrental' database in the terminal.

```
pg_restore -c -U mayank -d dvdrental -v "dvdrental.tar"
```

-- Restoring the database from the given tar file

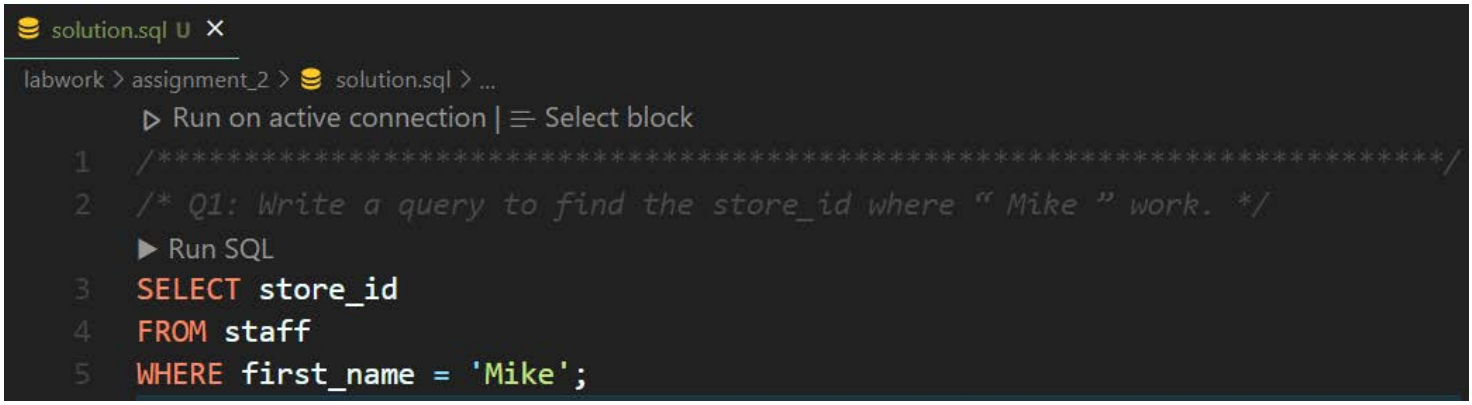
-- -c flag to clean the already created database

-- -U to provide the username

-- -d to provide the already created database with that user

-- -v for verbose

Q1. Write a query to find the store_id where “Mike” work.




```
dvdrental=# \i solution.sql
 store_id
----------
        1
(1 row)
```

Q2: Write a query to find the address, district, city and country of the customer with first name " Linda " and last name " Williams "

solution.sql U

labwork > assignment_2 > solution.sql > ...

Run on active connection | Select block

```sql
/* Write a query to find the address, district, city and
country of the customer with first name " Linda " and
last name " Williams " */
```

Run SQL

```sql
SELECT address,
    district,
    city,
    country
FROM customer,
    address,
    city,
    country
WHERE customer.first_name = 'Linda'
    and customer.last_name = 'Williams'
    and customer.address_id = address.address_id
    and address.city_id = city.city_id
    and city.country_id = country.country_id;
```

```
dvdrental=# \i solution.sql
      address       | district |  city   | country
--------------------+----------+---------+---------
 692 Joliet Street | Attika   | Athenai | Greece
(1 row)
```

Q3: Write a query to find the title of films offered for rent in store_id = 1 and film category is " Comedy " and sort the films in descending order

solution.sql U

labwork > assignment_2 > solution.sql > ...

Run on active connection | Select block

```sql
/* Write a query to find the title of films offered for
rent in store_id = 1 and film category is " Comedy " and
sort the films in descending order */
```

Run SQL

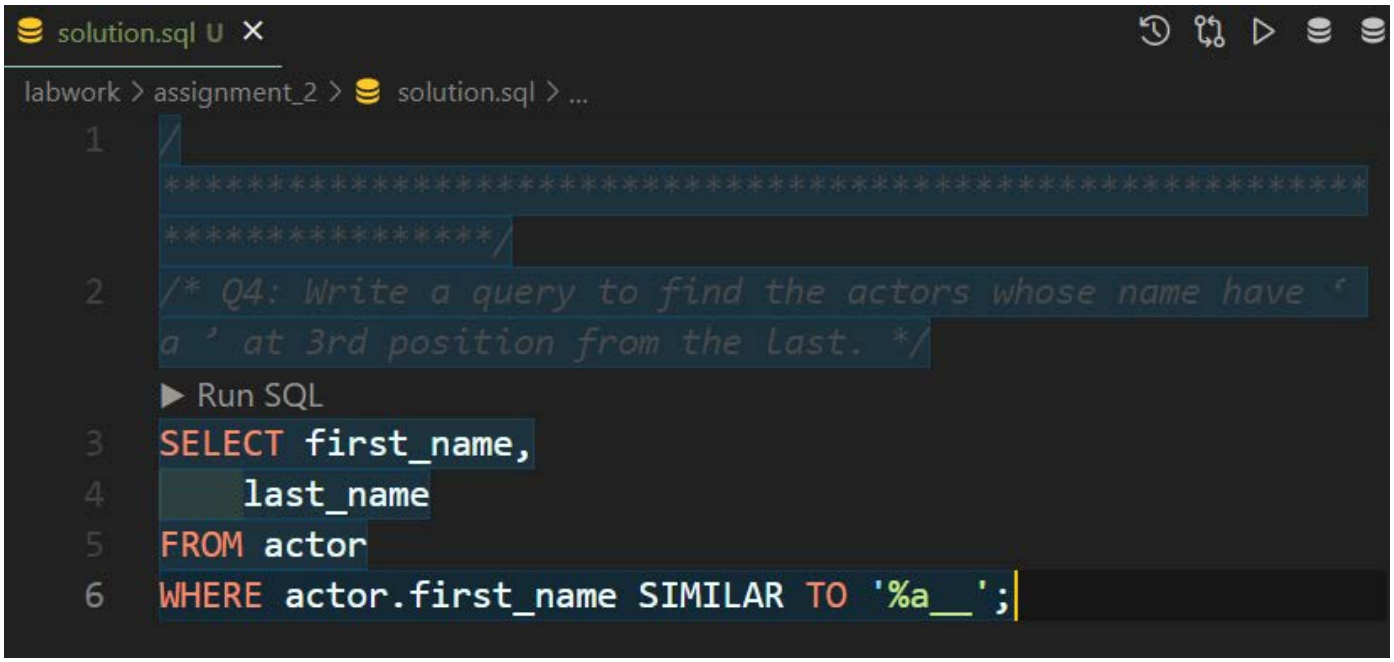
```sql
SELECT DISTINCT title
FROM film,
    inventory,
    film_category,
    category
WHERE inventory.store_id = 1
    and inventory.film_id = film.film_id
    and film.film_id = film_category.film_id
    and category.category_id = film_category.category_id
    and category.name = 'Comedy'
ORDER BY film.title DESC;
```

```
          title
------------------------
 Zorro Ark
 Wisdom Worker
 Velvet Terminator
 Valley Packer
 Tramp Others
 Trainspotting Strangers
 Sweden Shining
 Strictly Scarface
 Snatch Slipper
 Searchers Wait
 Saturn Name
 Pure Runner
 Pinocchio Simon
 Perfect Groove
 Party Knock
 Paradise Sabrina
 Operation Operation
 Mystic Truman
 Memento Zoolander
 Mallrats United
 Lonely Elephant
 Lion Uncut
 Knock Warlock
 Jaws Harry
 Hustler Party
:
```

```
 Hustler Party
 Hurricane Affair
 Hedwig Alter
 Heaven Freedom
 Gunfight Moon
 Groundhog Uncut
 Gold River
 Freedom Cleopatra
 Flintstones Happiness
 Fireball Philadelphia
 Ferris Mother
 Element Freddy
 Dying Maker
 Downhill Enough
 Doom Dancing
 Daddy Pittsburgh
 Crazy Home
 Control Anthem
 Connection Microcosmos
 Closer Bang
 Cat Coneheads
 Caper Motions
 Bringing Hysterical
 Anthem Luke
 Airplane Sierra
(49 rows)

(END)
```

Q4: Write a query to find the actors whose name have ‘ a ’ at 3rd position from the last.




```
dvdrental=# \i solution.sql
 first_name |  last_name
------------+-------------
 Grace      | Mostel
 Karl       | Berry
 Gary       | Phoenix
 Mary       | Tandy
 Gary       | Penn
 Cary       | Mcconaughey
 Cate       | Mcqueen
 Jane       | Jackman
 Richard    | Penn
 Cate       | Harris
 Jada       | Ryder
 Michael    | Bening
 Michael    | Bolger
 Mary       | Keitel
(14 rows)
```

Q5: Write a query to find the films containing three vowels together with description containing " Action " in it.

```
solution.sql U ×
labwork > assignment_2 > solution.sql > ...
▷ Run on active connection | ≡ Select block
/*******************************************************************/
/* Q5: Write a query to find the films containing three vowels together with description containing " Action " in it. */
▶ Run SQL
SELECT DISTINCT title,
       description
FROM film
WHERE film.title SIMILAR TO '%[aeiou]{3}%'
       and film.description LIKE '%Action%';
```

```
      title        |                                          description
-------------------+---------------------------------------------------------------------------------------------------------
 Gorgeous Bingo     | A Action-Packed Display of a Sumo Wrestler And a Car who must Overcome a Waitress in A Baloon Factory
 Interview Liaisons | A Action-Packed Reflection of a Student And a Butler who must Discover a Database Administrator in A Manhattan Penthouse
(2 rows)

(END)
```

Q6: Write a query to find the title of films in which “ Penelope Guiness ” and “ Jennifer Davis ” worked together (Use Set Operation).

solution.sql U

labwork > assignment_2 > solution.sql > ...

```sql
/**********************************************************************
***********/
/* Q6: Write a query to find the title of films in which “
Penelope Guiness ” and “ Jennifer Davis ” worked together
(Use Set Operation). */
▶ Run SQL
SELECT DISTINCT title
FROM actor,
    film,
    film_actor
WHERE actor.first_name = 'Penelope'
    and actor.last_name = 'Guiness'
    and actor.actor_id = film_actor.actor_id
    and film_actor.film_id = film.film_id
INTERSECT
SELECT DISTINCT title
FROM actor,
    film,
    film_actor
WHERE actor.first_name = 'Jennifer'
    and actor.last_name = 'Davis'
    and actor.actor_id = film_actor.actor_id
    and film_actor.film_id = film.film_id;
```

```
dvdrental=# \i solution.sql
        title
----------------------
 Oklahoma Jumanji
 Splash Gump
 Anaconda Confessions
 Angels Life
(4 rows)
```