W1D1 Assignment:

1. Briefly discuss
    a.
        i. Data
        Any fact or figures collected through observation or measurement, for the purpose of reference or analysis. Single items that are stored in a database.
        ii. Database
        Is an organized or structured collection of related data. A database is usually controlled by a database management system.
        iii. Database management system
        Is a software that manages and controls access to and operation of , a database.
        iv. Database application program
        Is any computer program that interacts with a database at some point during its execution.
    b. Describe the main characteristics of data approach and contrast it will the file-based approach.
    File-based approach is a collection of application programs that perform services for the end-users, such as the production of reports. The operation in file-based systems were decentralized than centralized. Hence, the file-based approach is as compared to database approach suffers significant limitations. These includes, separation and isolation of data, duplication of data, data dependence, incompatible file formats, and fixed queries.
    c. What are the five component of DBMS environment and how are they related to each other?
    The five components of DBMS environment are hardware, software, data, procedures, and peoples. Date is the main bridge between the machine components and the human components. The database contains both the operational data and the metadata.
    d. dreamHome
        i. main object that needs to be represented in the database?
        Sales department have property for rent, private owner and client objects represented and data collected for.
        Contract department on the other hand contains lease, property for rent and client (data is collected for each property of the object).
        ii. What relationships do you think exist between these main objects?

There is a duplicated collection of data in each objects and one- to many relationships between these objects.

iii. For each of the objects, what details do you think need to be stored in the database?

Sales department:

Property (propertyNo, street, city, postcode, type, rooms , rent and ownerNo)
PrivateOwner(ownerNo, fName, address, telNo, prefType, rent),
Client(clientNo, fName, lName, address, telNo)

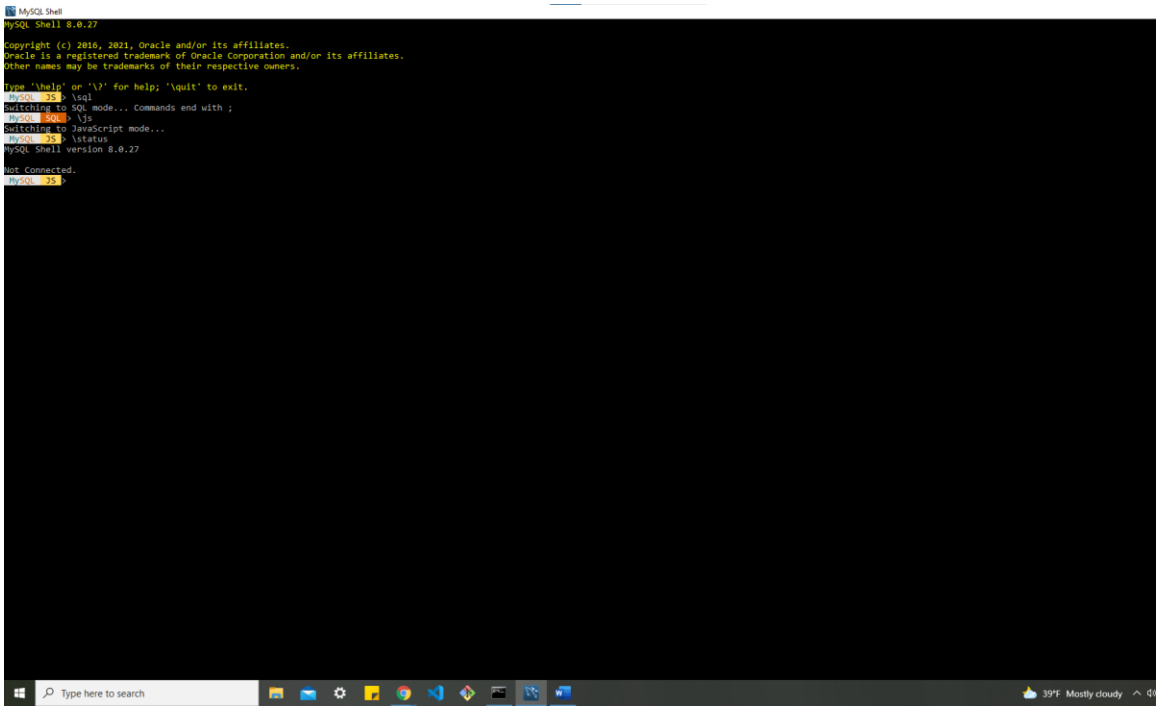
Contract department:

Lease(leaseNo, propertyNo, clientNo, rent, paymentMethods, deposit, paid, rentStart, rentFinish and duration.
ProperyForRent(propertyNo, street, city, postcode, rent),
Client(clientNo, fName, lName, address, telNo).

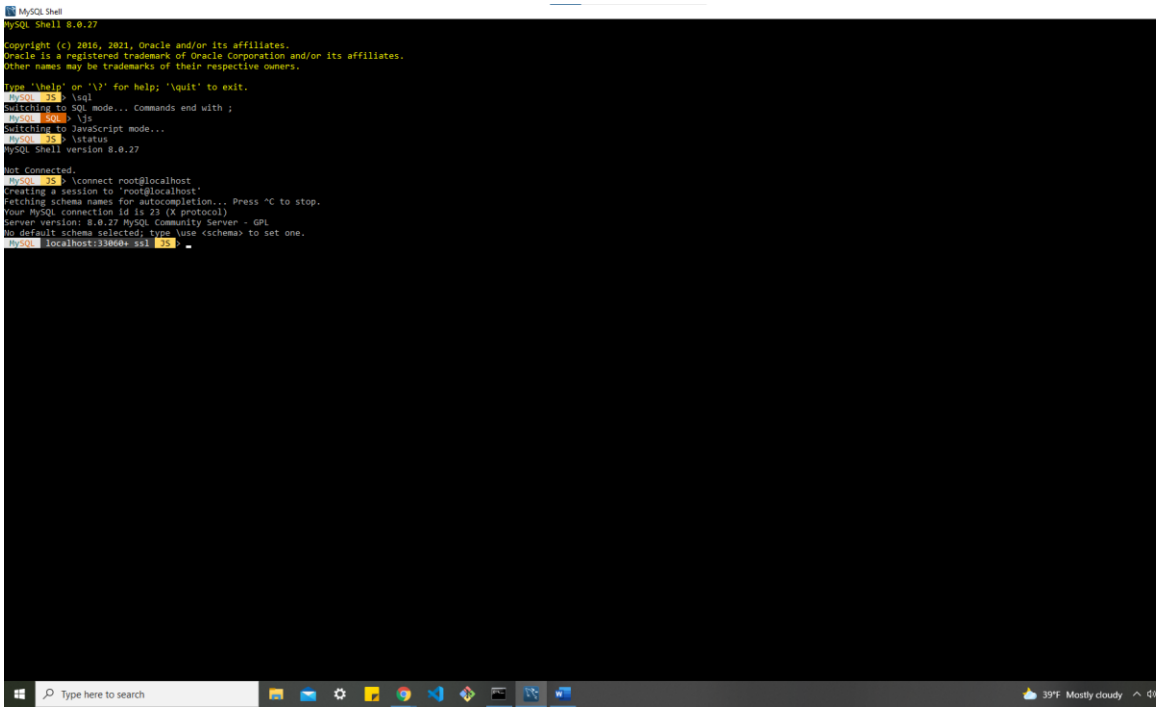
iv. Give at least 3 queries you think will be required.

1.find private owner whose last name starts with D
2. find a lease that finished on end of July.
3.find list of homes with 4 bedrooms and less than $500 monthly rent in Fairfax, IA

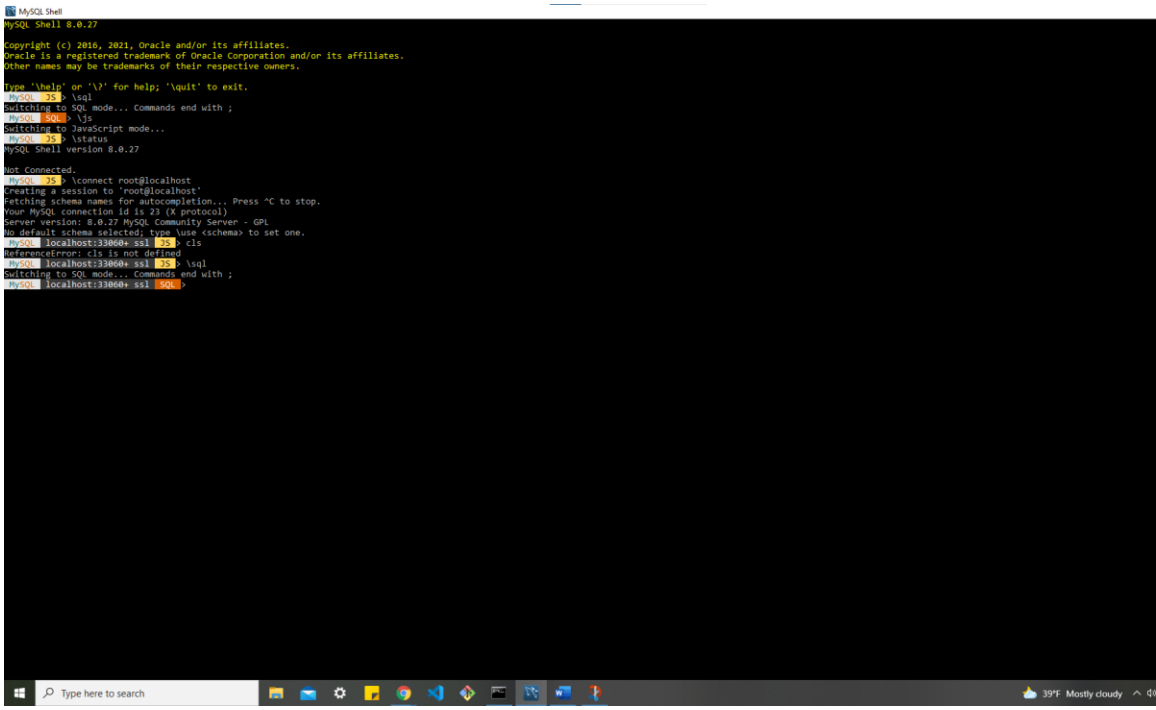
2. Perform the following tasks?
    a. Obtain and install the MySQL => done.
    b. Complete the following tasks
        i. Start MySQL database server
        ii. Launch and perform
            1. MySQL JS > \status



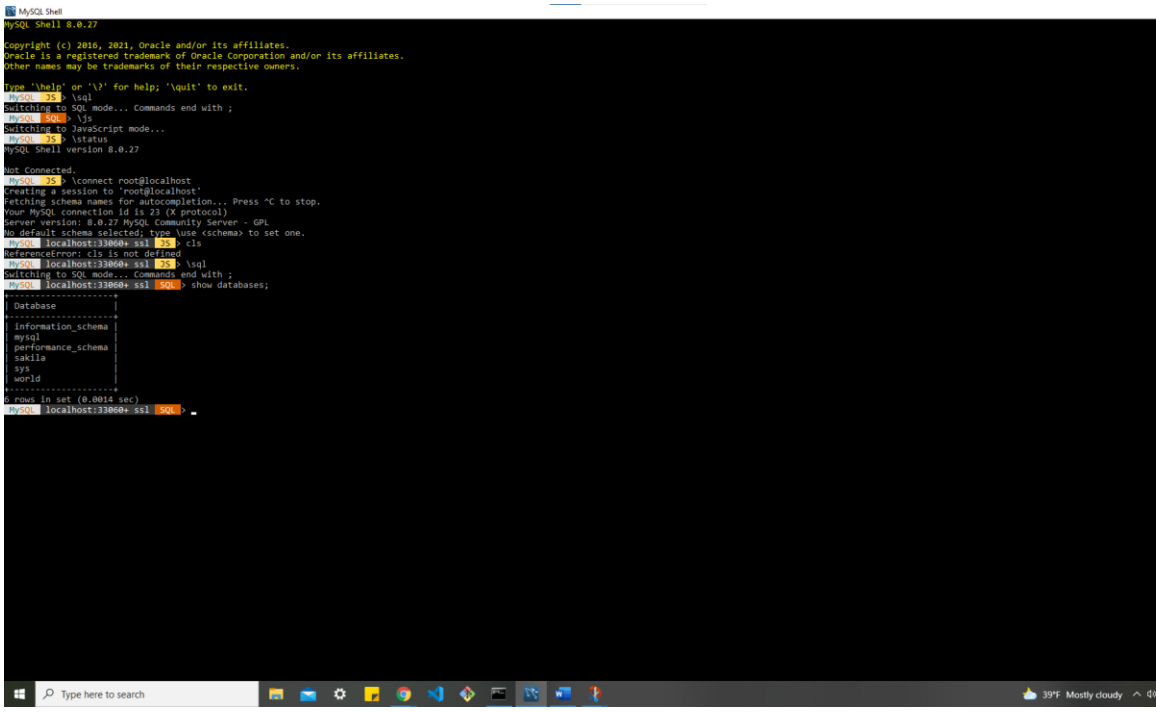
2. MySQL JS > \connect root@localhost



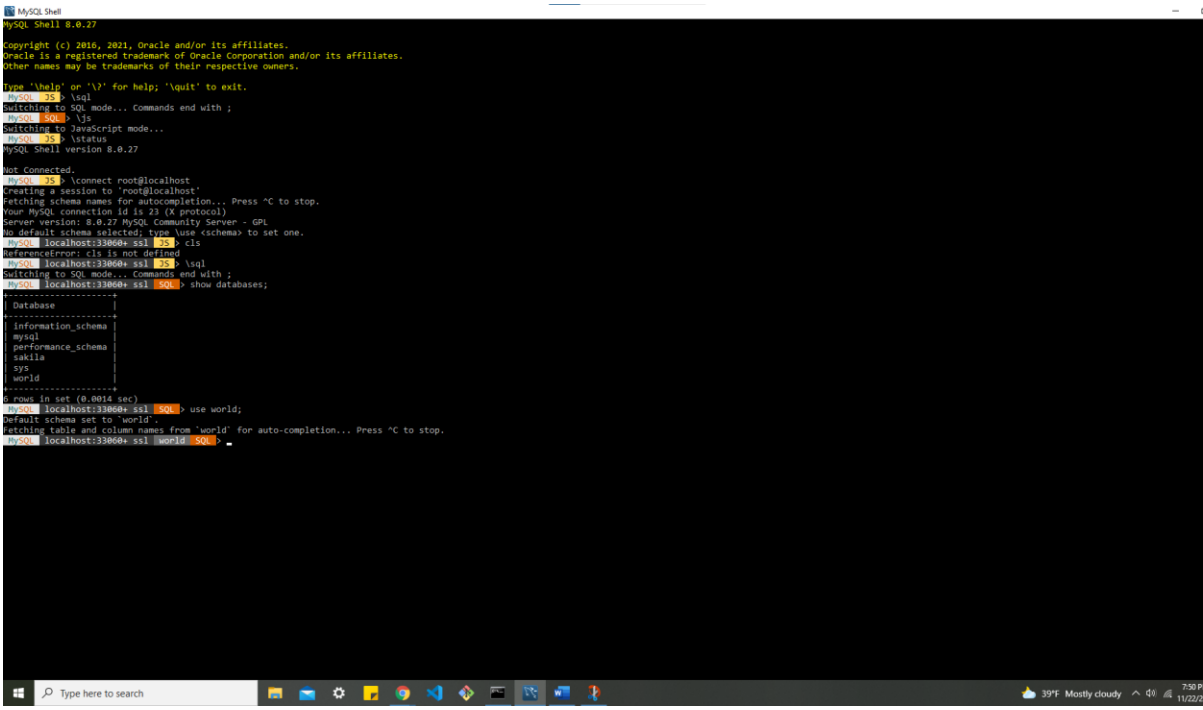
3. MySQL JS > \sql



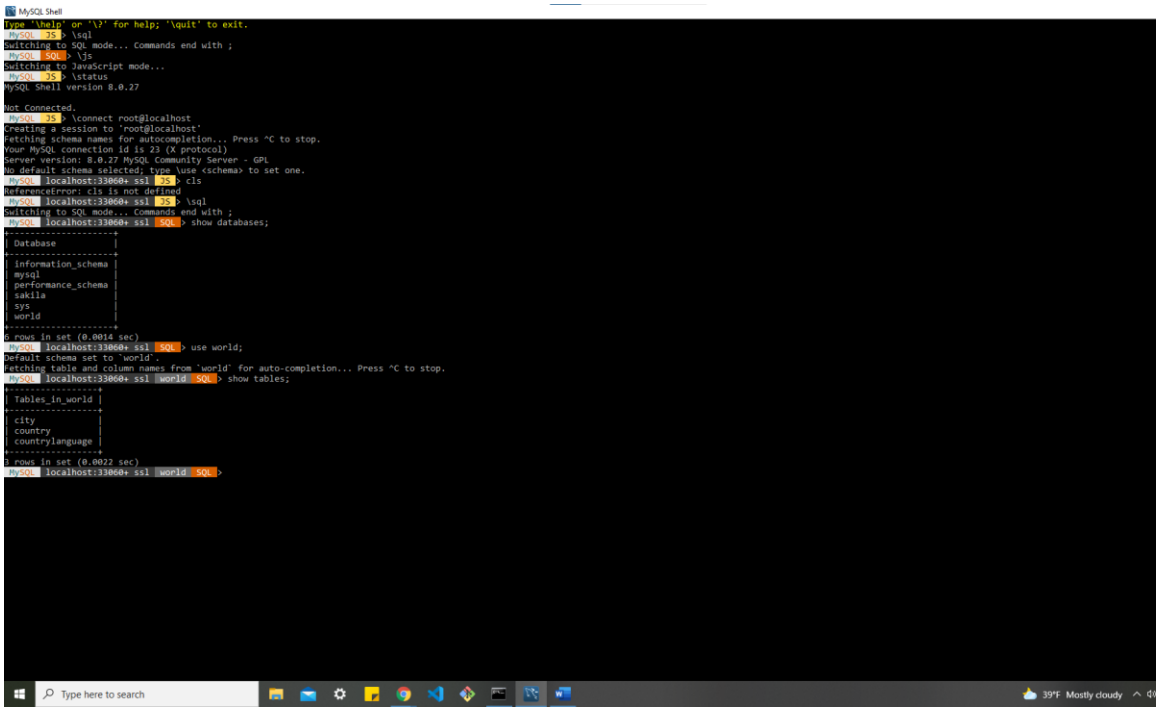
4. MySQL localhost:33060+ ssl SQL > show databases;



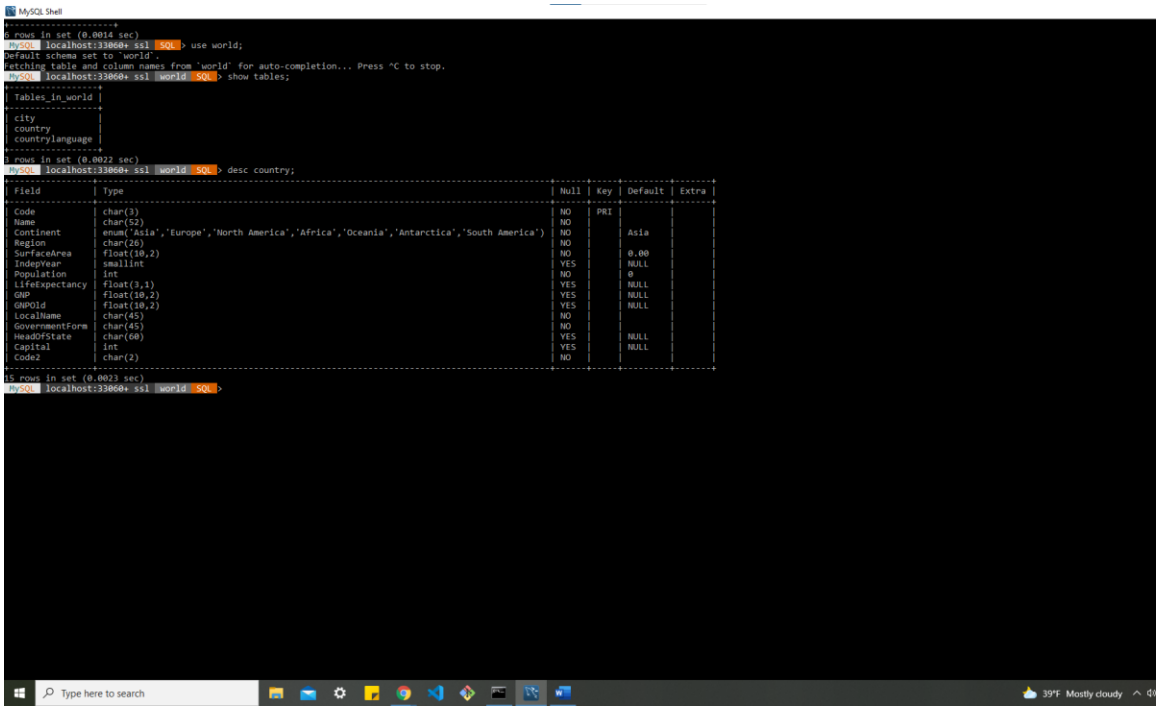
5. MySQL localhost:33060+ ssl SQL > use world



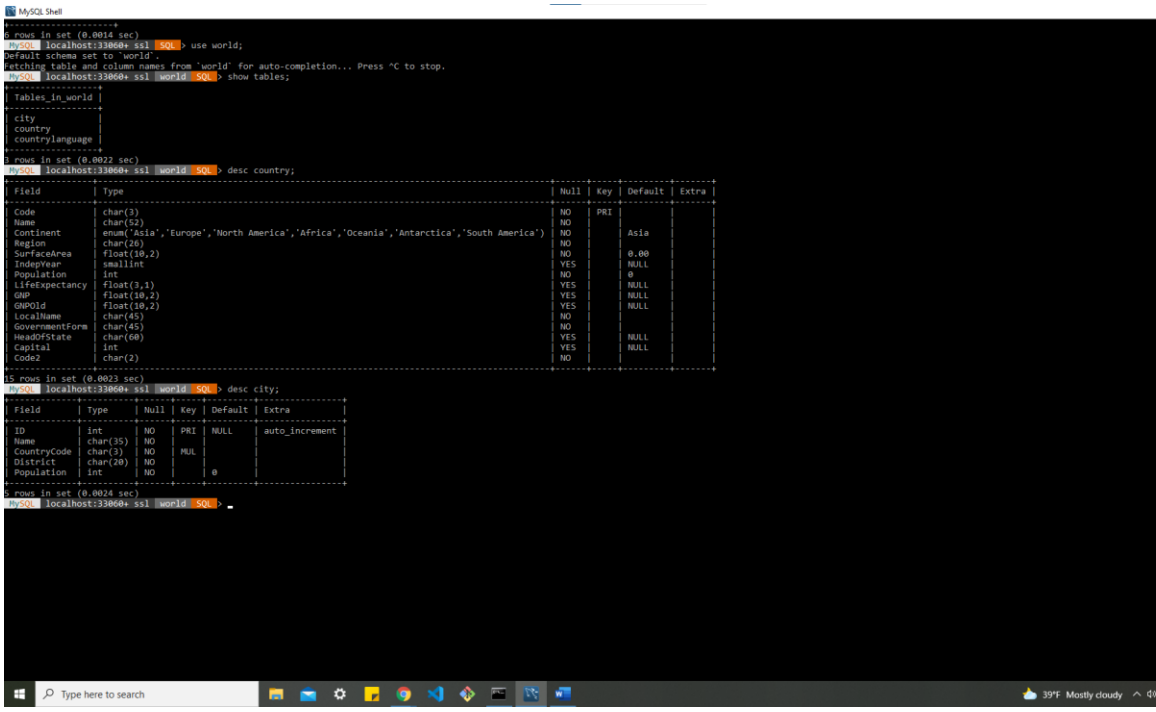
6. MySQL localhost:33060+ ssl SQL > show tables;



7. MySQL localhost:33060+ ssl SQL > desc country;



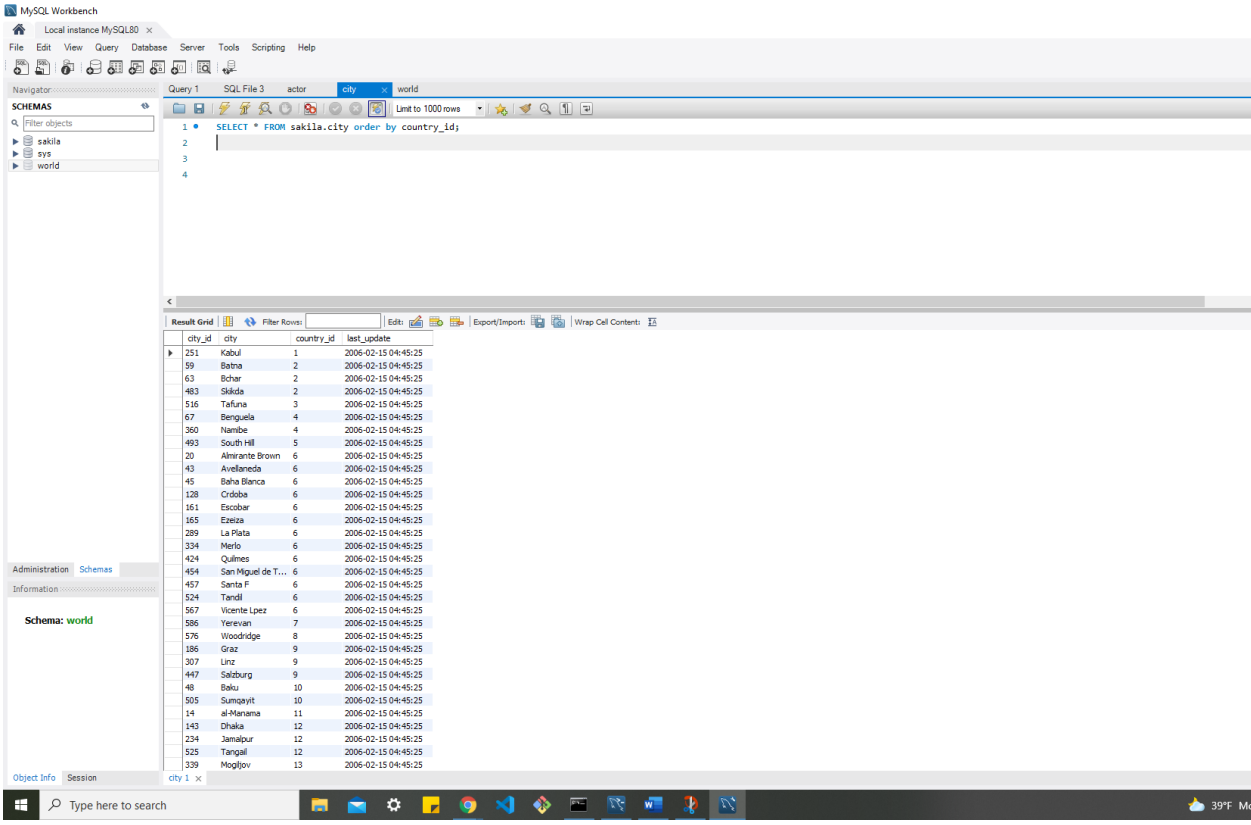
8. MySQL localhost:33060+ ssl SQL > desc city;



iii. Carefully examine the schema/specifications for both the table named, country and the one named, city. Is there any relationship(s) between the two tables? Yes or No? If yes, describe the relationship(s) which you can identify.

Yes, and the tables are connected each other with some sort of id (keys).

iv. Launch /open the MySQL Workbench GUI tool and take a screenshot of it.


MySQL Workbench
Local instance MySQL80
File Edit View Query Database Server Tools Scripting Help
Navigator
SCHEMAS
Filter objects
sakila
sys
world
Query 1 SQL File 3 actor city world
Limit to 1000 rows
1 SELECT * FROM sakila.city order by country_id;
2
3
4
Result Grid Filter Rows: Edit: Export/Import: Wrap Cell Content:
city_id city country_id last_update
251 Kabul 1 2006-02-15 04:45:25
59 Batna 2 2006-02-15 04:45:25
63 Bchar 2 2006-02-15 04:45:25
483 Skikda 2 2006-02-15 04:45:25
516 Tafuna 3 2006-02-15 04:45:25
67 Benguela 4 2006-02-15 04:45:25
360 Namibe 4 2006-02-15 04:45:25
493 South Hill 5 2006-02-15 04:45:25
20 Almirante Brown 6 2006-02-15 04:45:25
43 Avellaneda 6 2006-02-15 04:45:25
45 Bahia Blanca 6 2006-02-15 04:45:25
128 Crdoba 6 2006-02-15 04:45:25
161 Escobar 6 2006-02-15 04:45:25
165 Ezeiza 6 2006-02-15 04:45:25
289 La Plata 6 2006-02-15 04:45:25
334 Merlo 6 2006-02-15 04:45:25
424 Quilmes 6 2006-02-15 04:45:25
454 San Miguel de T... 6 2006-02-15 04:45:25
457 Santa F 6 2006-02-15 04:45:25
524 Tandil 6 2006-02-15 04:45:25
567 Vicente Lpez 6 2006-02-15 04:45:25
586 Yerevan 7 2006-02-15 04:45:25
576 Woodridge 8 2006-02-15 04:45:25
186 Graz 9 2006-02-15 04:45:25
307 Linz 9 2006-02-15 04:45:25
447 Salzburg 9 2006-02-15 04:45:25
48 Baku 10 2006-02-15 04:45:25
505 Sumqayit 10 2006-02-15 04:45:25
14 al-Manama 11 2006-02-15 04:45:25
143 Dhaka 12 2006-02-15 04:45:25
234 Jamalpur 12 2006-02-15 04:45:25
525 Tangail 12 2006-02-15 04:45:25
339 Mogiljov 13 2006-02-15 04:45:25
Administration Schemas
Information
Schema: world
Object Info Session
city 1
Type here to search
39°F