CSE 560- Data Models and Query Languages

PA 0: Hello SQorLd

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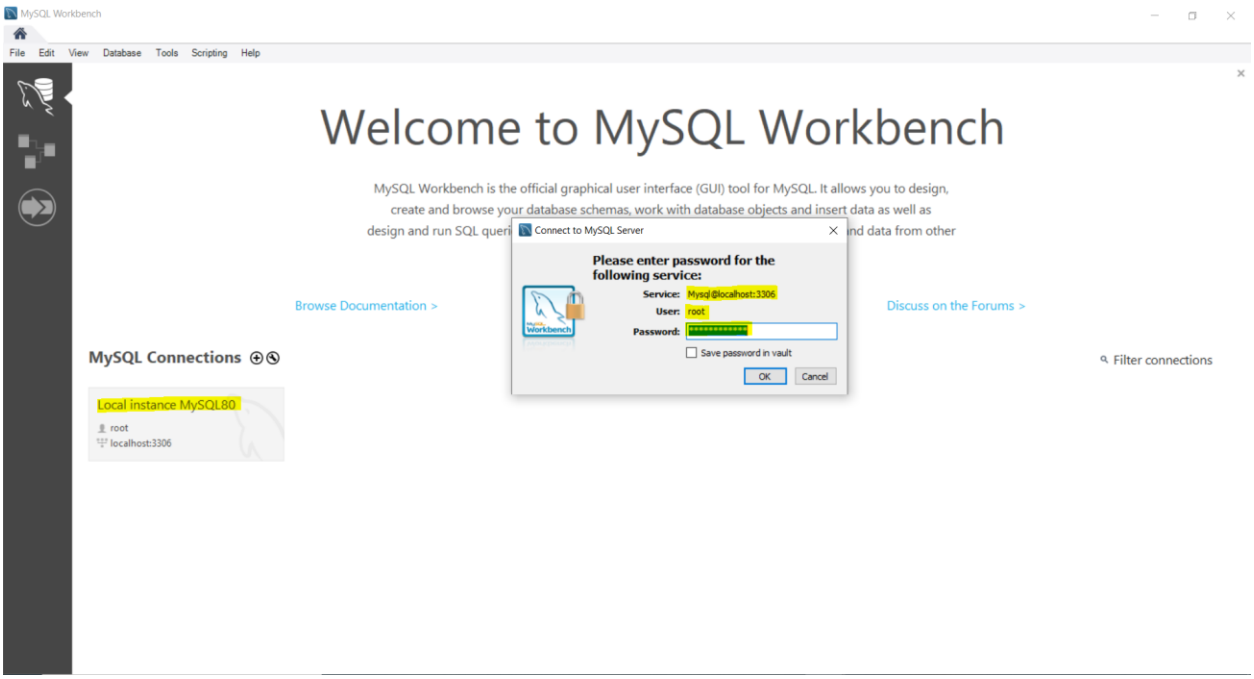
Part 1 - Setting up MySQL Server/Client

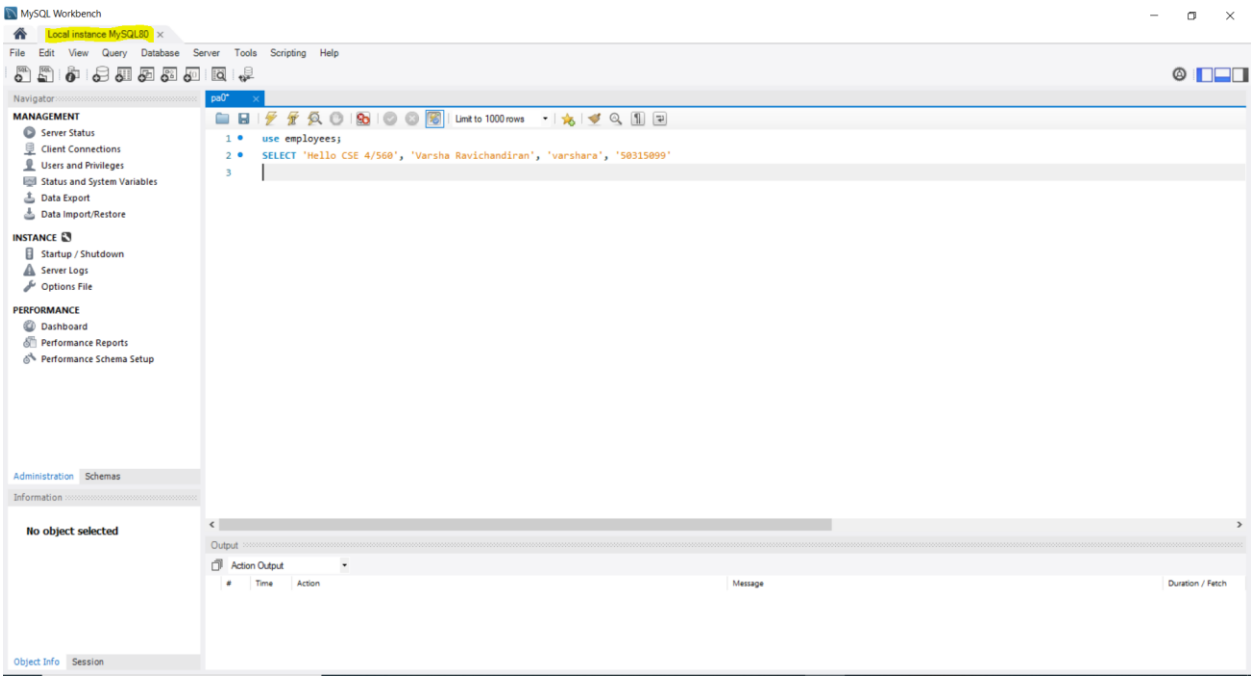
1. Goal:

The goal of this task is to install the MySQL Server/Client version 8.0.13 and test the connection from the workbench installed.

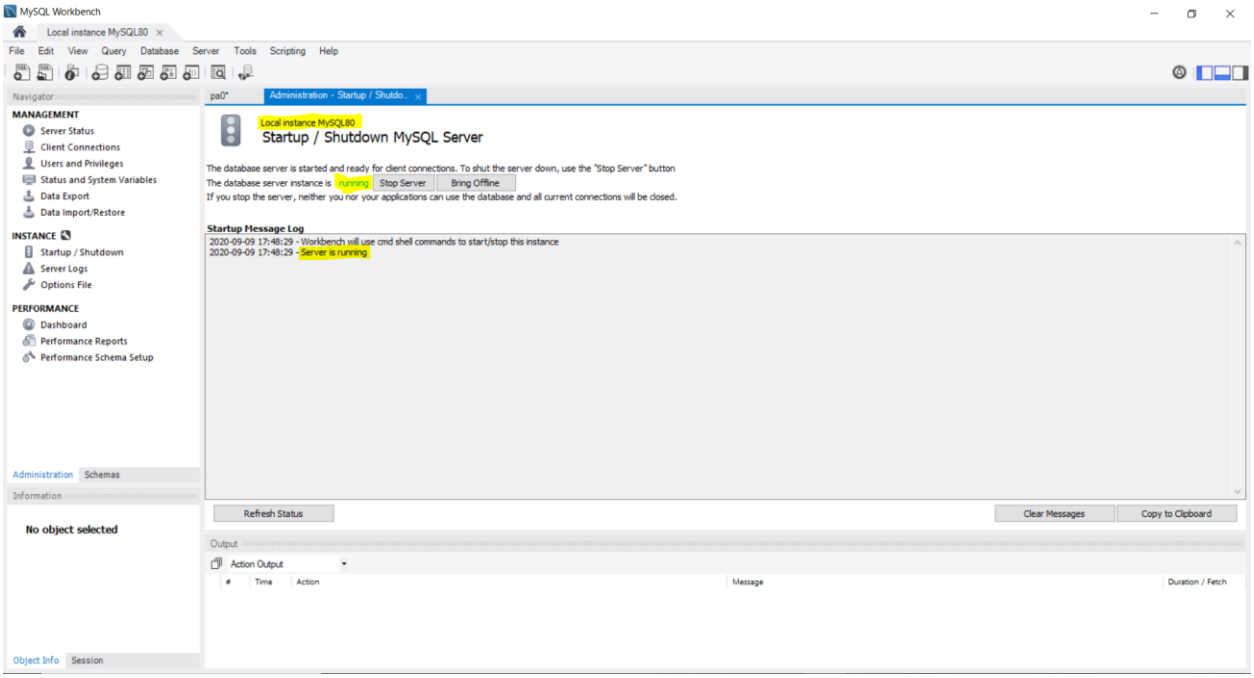
2. Screenshots:



The above screenshot represents the connection. After providing the corresponding username and password the client gets connected to the server. The highlighted portions in the screenshots represent the server instance, user and password.



The above screenshot represents the connection established and the user is now ready to query into the databases. The highlighted portion in the screenshot represent the current server instance.



The above screenshot represents the instances that are running currently in the server.

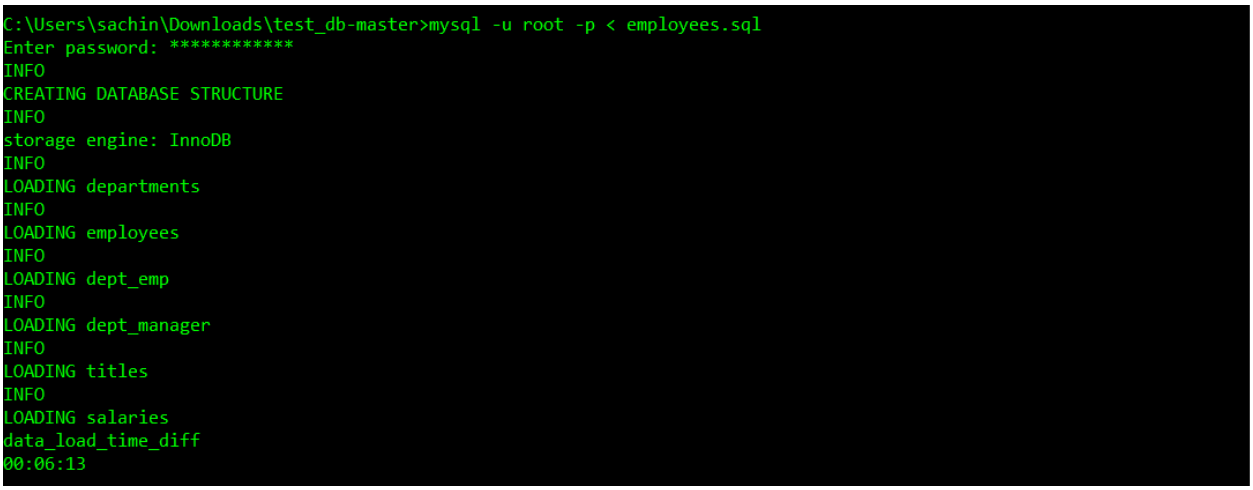
Part 2 - Setting up a database

1. Goal:

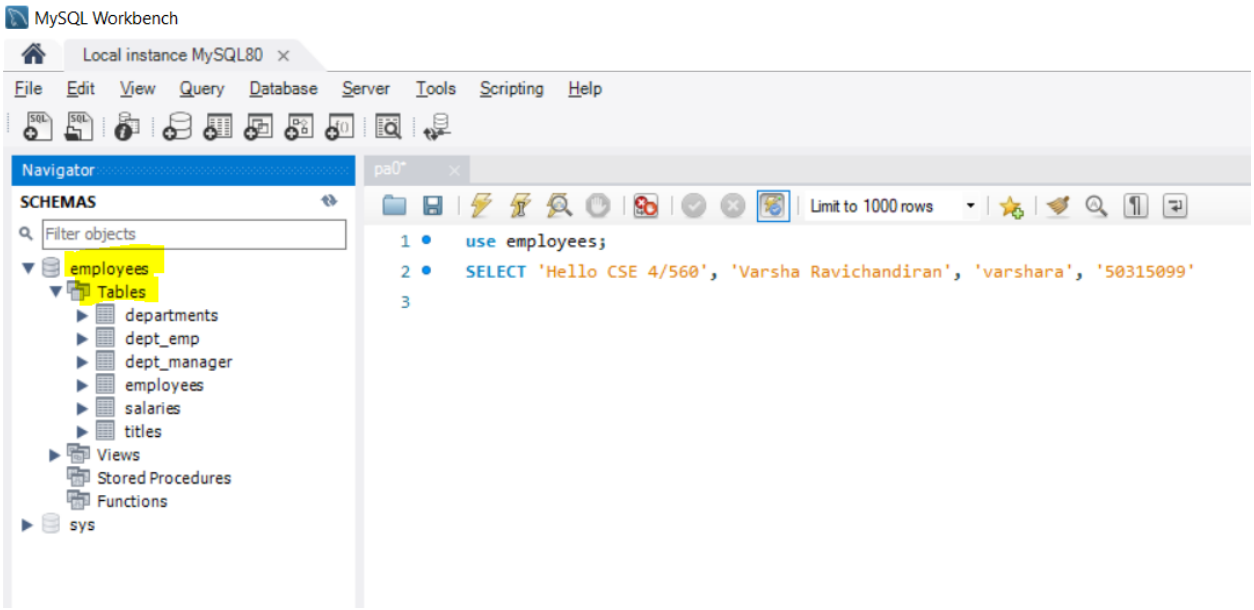
The goal of this task is to set up the databases in the Server to work on.

2. Screenshots:

A database is a collection of information that is organized so that it can be easily accessed, managed, and updated.

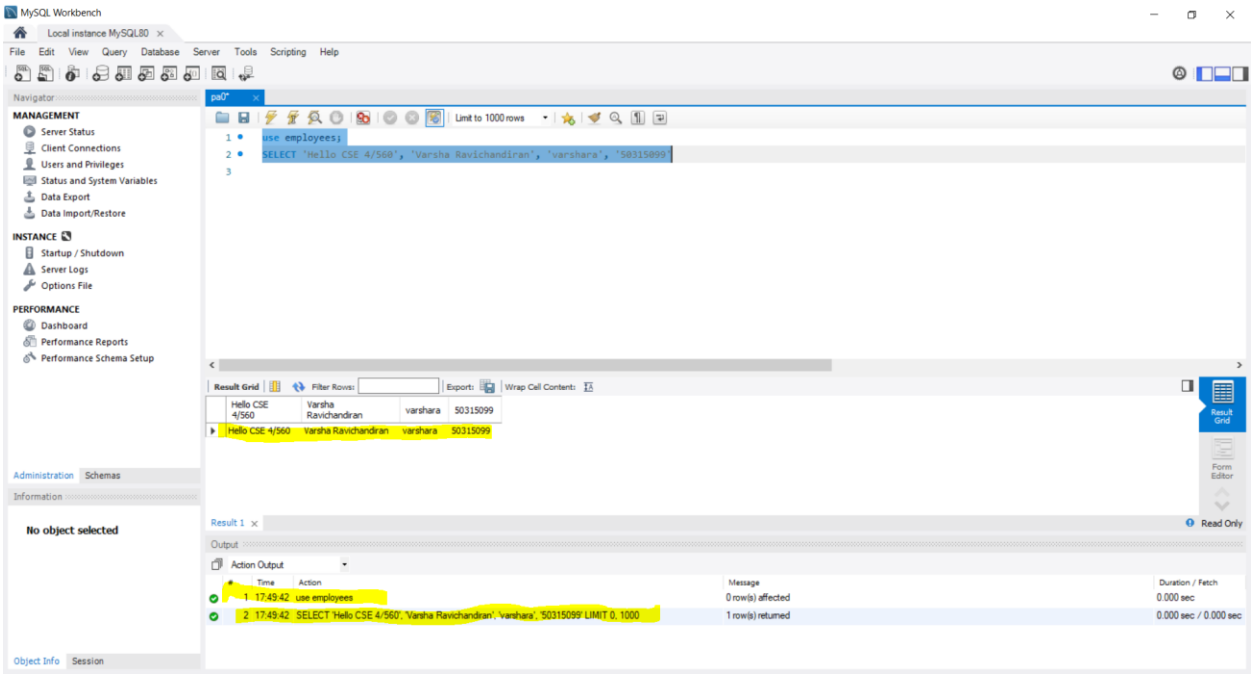


The above screenshot is the result of **step 3** from this part. The command **mysql -u root -p < employees.sql** is used to execute the employees.sql file. After execution, it created a database structure(schemas) and imported all the tables and their corresponding data to the mysql server. It also creates a storage engine. Storage engines are MySQL components that handle the SQL operations for different table types. InnoDB is the default and most general-purpose storage engine. The -u and -p in the command specifies the username and password. The below screenshot is the proof of database being created and loaded.

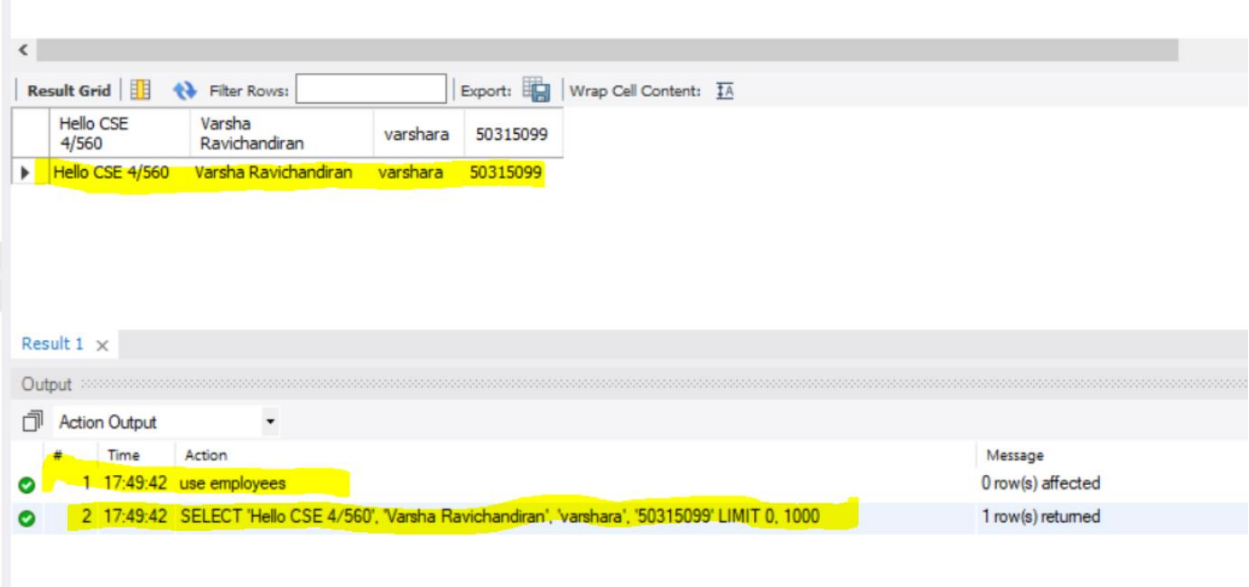



```
C:\Users\sachin\Downloads\test_db-master>mysql -u root -p < test_employees_md5.sql
Enter password: ************
INFO
TESTING INSTALLATION
table_name      expected_records        expected_crc
departments     9       d1af5e170d2d1591d776d5638d71fc5f
dept_emp        331603  ccf6fe516f990bdaa49713fc478701b7
dept_manager    24      8720e2f0853ac9096b689c14664f847e
employees       300024  4ec56ab5ba37218d187cf6ab09ce1aa1
salaries        2844047 fd220654e95aea1b169624ffe3fca934
titles  443308  bfa016c472df68e70a03facafa1bc0a8
table_name      found_records           found_crc
departments     9       d1af5e170d2d1591d776d5638d71fc5f
dept_emp        331603  ccf6fe516f990bdaa49713fc478701b7
dept_manager    24      8720e2f0853ac9096b689c14664f847e
employees       300024  4ec56ab5ba37218d187cf6ab09ce1aa1
salaries        2844047 fd220654e95aea1b169624ffe3fca934
titles  443308  bfa016c472df68e70a03facafa1bc0a8
table_name      records_match   crc_match
departments     OK      ok
dept_emp        OK      ok
dept_manager    OK      ok
employees       OK      ok
salaries        OK      ok
titles  OK      ok
computation_time
00:06:30
summary result
CRC     OK
count   OK
```

The above screenshot is the result of **step 4** from this part. The command **mysql -u root -p < test_employees_md5.sql (or mysql -t < test_employees_md5.sql)** does validation on the imported schemas and the tables. The cmd line results produces the status of these validations. Validations like the count of tables, records of data etc in that particular database are checked. The -u and -p in the command specifies the username and password. -t in the command line produces the validation results in a tabulated format.



The above screenshot is the result of **step 5** from this part. The use database command is used to go to that particular database(‘employees’). The next command select is used to print the comma seperated values as a table and the below screenshot represent the same.



Conclusion:

I was able to successfully set up the MySQL Server/Client and I was able to learn the basics of MySql and its basic commands.