

Assignment #1 (20 points)

Due Date: Monday, January 11th, 11:59 PM

Objectives

The purpose of this assignment is to introduce the MySQL server and how to use it. Upon completion, in addition to gaining familiarity with some common SQL commands, you will also be able to:

- Write SQL statements
- Use the MySQL command line client
- Execute a few SQL queries
- Write a script

Read your .txt file prior to submission and verify it contains the following:

- the set commands as provided in the template
- your name as a comment
- the query number for each query as a comment
- the SQL query(queries) needed at each step
- the output for each step

Provided files:

A SQL script is a set of SQL commands saved as a file in SQL Scripts. A SQL script can contain one or more SQL statements

1. *yourname_assignment1.sql* file

This file includes SQL commands that 1. create the University database and the student table, 2. confirms that you have created the table correctly by describing the student table, and 3. confirms that you have added all data correctly by viewing the data in the table.

2. *Assignment 1 Sample.pdf* file

This file includes a sample of the .txt file which consists of the output that you should submit as a .txt file. I have provided all the SQL statements you will need to complete Assignment 1. All you need to do is to test the MySQL server you have installed onto your computer by running these SQL statements.

Step 1: Download and install MySQL server

1. Download and install MySQL server and MySQL Workbench.
2. Create a new folder named *my_scripts* on your hard drive or C drive.
3. Place the script file *yourname_assignment1.sql* in the folder *my_scripts*.

Step 2 (MacOS): Run the Script File

1. Change to the directory where MySQL was installed. Type the following command:

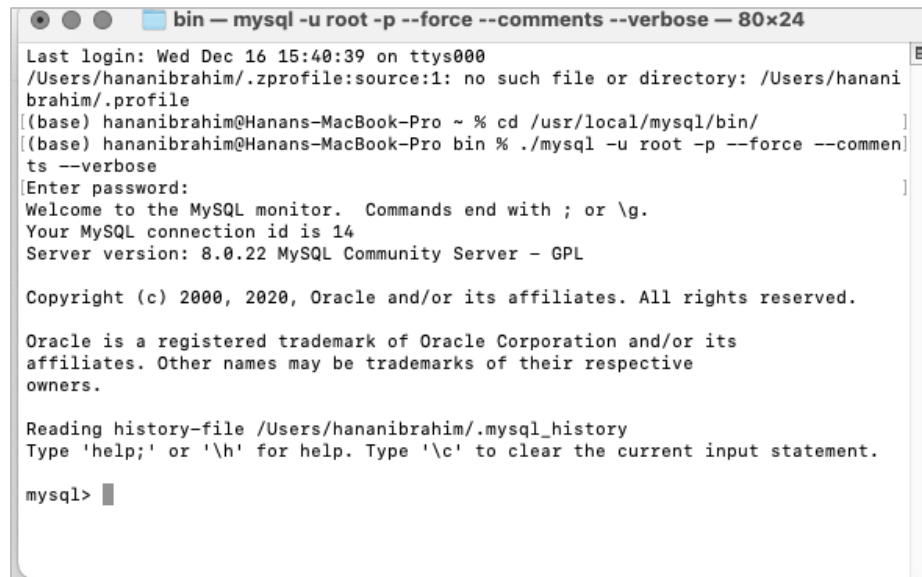
```
% cd /usr/local/mysql/bin/
```

2. Type the following command:

```
% ./mysql -u root -p --force --comments --verbose
```

This command is given from a command prompt, not from a MySQL prompt.

You are prompted for your password.



```
bin — mysql -u root -p --force --comments --verbose — 80x24
Last login: Wed Dec 16 15:40:39 on ttys000
/Users/hananibrahim/.zprofile:source:1: no such file or directory: /Users/hananibrahim/.profile
(hbase) hananibrahim@Hanans-MacBook-Pro ~ % cd /usr/local/mysql/bin/
(hbase) hananibrahim@Hanans-MacBook-Pro bin % ./mysql -u root -p --force --comments --verbose
[Enter password:]
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 14
Server version: 8.0.22 MySQL Community Server - GPL

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owners.

Reading history-file /Users/hananibrahim/.mysql_history
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql>
```

3. After you log into MySQL, you will see the **mysql>** prompt:

```
mysql>
```

4. Use the **tee** command to put your output in a .txt file to submit.

You will need to know the path to the *my_scripts* directory in order to set it as a variable in the steps below. It is listed as "**path-to**" below:

```
mysql> tee path-to/yourname_assignment1.txt
```

Example:

```
mysql> tee /Users/hananibrahim/Desktop/my_scripts/yourname_assignment1.txt
```

5. Run the SQL script *yourname_assignment1.sql*

```
mysql> source /Users/hananibrahim/Desktop/my_scripts/yourname_assignment1.sql
```

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```
bin -- mysql -u root -p --force --comments --verbose -- 135x41
Last login: Wed Dec 16 15:59:51 on ttys000
/Users/hananibrahim/.zprofile:source:1: no such file or directory: /Users/hananibrahim/.profile
(base) hananibrahim@Hanans-MacBook-Pro ~ % cd /usr/local/mysql/bin/
(base) hananibrahim@Hanans-MacBook-Pro bin % ./mysql -u root -p --force --comments --verbose
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 20
Server version: 8.0.22 MySQL Community Server - GPL

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owners.

Reading history-file /Users/hananibrahim/.mysql_history
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> tee /Users/hananibrahim/Desktop/my_scripts/yourname_assignment1.txt
Logging to file '/Users/hananibrahim/Desktop/my_scripts/yourname_assignment1.txt'
mysql> source /Users/hananibrahim/Desktop/my_scripts/yourname_assignment1.sql
-----

CREATE DATABASE IF NOT EXISTS university
-----

Query OK, 1 row affected (0.00 sec)

Database changed

/* drop the table */

DROP TABLE IF EXISTS student

-----

Query OK, 0 rows affected, 1 warning (0.00 sec)

-----

/* Query 1 */

CREATE TABLE student(
```

6. Type in **notee** to stop the tee command:

```
mysql> notee
```

```
bin -- mysql -u root -p --force --comments --verbose -- 135x56
-----
INSERT INTO student VALUES(750, 'robert','ben', '2012-03-01','rben@school.edu')
-----

Query OK, 1 row affected (0.00 sec)

-----
INSERT INTO student VALUES(760, 'jeanne','ben', '2012-03-01','jben@school.edu')
-----

Query OK, 1 row affected (0.00 sec)

-----
INSERT INTO student VALUES(770, 'mills','carmen', '2013-04-01','mcarmen@school.edu')
-----

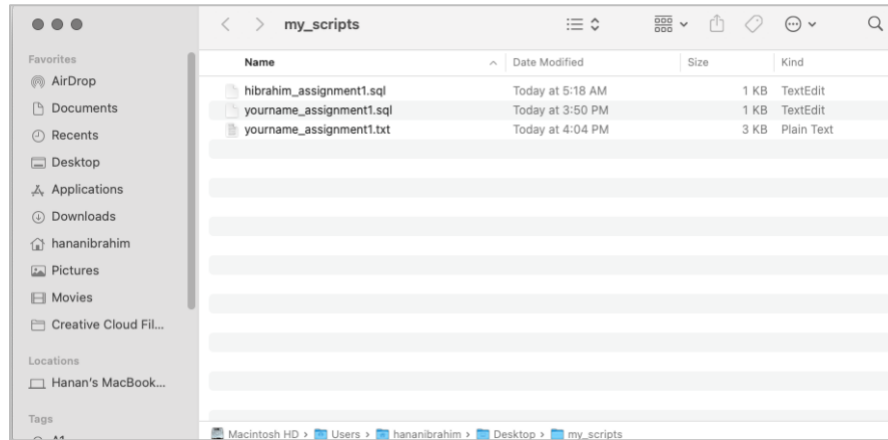
Query OK, 1 row affected (0.00 sec)

-----
/* Query 3 */
DESCRIBE student
-----
+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| student_id | int | NO | PRI | NULL | |
| first_name | varchar(50) | NO | | NULL | |
| last_name | varchar(50) | NO | | NULL | |
| reg_year | date | NO | | NULL | |
| email | varchar(50) | NO | UNI | NULL | |
+-----+
6 rows in set (0.01 sec)

-----
/* Query 4 */
SELECT * FROM student
-----
+-----+
| student_id | first_name | last_name | reg_year | email |
+-----+
| 720 | jack | smith | 2012-01-12 | jsmith@school.edu |
| 730 | noah | audry | 2012-01-01 | naudry@school.edu |
| 740 | rhonda | taylor | 2012-09-01 | rtaylor@school.edu |
| 750 | robert | ben | 2012-03-01 | rben@school.edu |
| 760 | jeanne | ben | 2012-03-01 | jben@school.edu |
| 770 | mills | carmen | 2013-04-01 | mcarmen@school.edu |
+-----+
6 rows in set (0.00 sec)

mysql> notee
Outfile disabled.
mysql>
```

A .txt file contains the queries entered as well as the output from those queries, so it is a convenient way to maintain a complete record of them.



Submission Instructions:

- For each of the queries above, submit both the query and result from running the query. Please use the provided SQL file to write your submissions.
- Change the name of the file *yourname_assignment1.sql* to your name (first name initial and last name). The script file name must follow the pattern *hibrahim_assignment1.sql* and the .txt file will have the same name with a .txt extension *hibrahim_assignment1.txt*.
- Zip the two files together to create one compressed file. **Example:** *hibrahim_assignment1.zip*
- Submit the zipped file containing the script and output .txt via Canvas.
- Remember to include the query number as a comment at each step.
- Read your output .txt file before submitting.