Third Year B. Tech (EL & CE)

Semester: V

Subject: Data Base Management System

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Class: TY

Roll No: 52

Batch: A3

Experiment No: 01

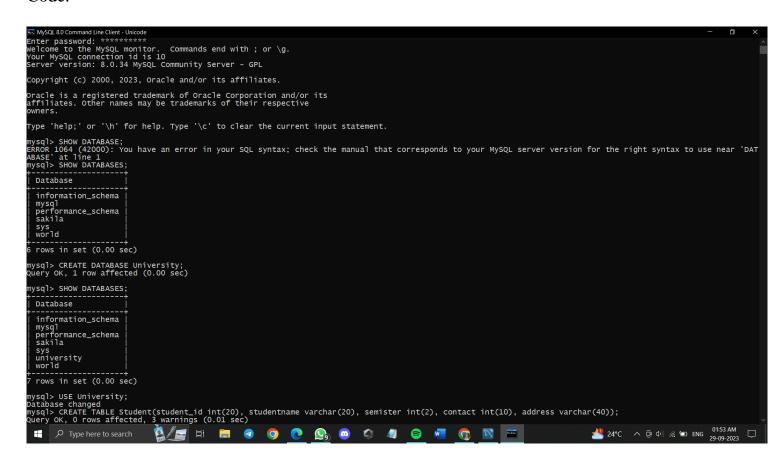**Name of the Experiment**: **SQL- DDL Commands**

Performed on: 13/09/2023

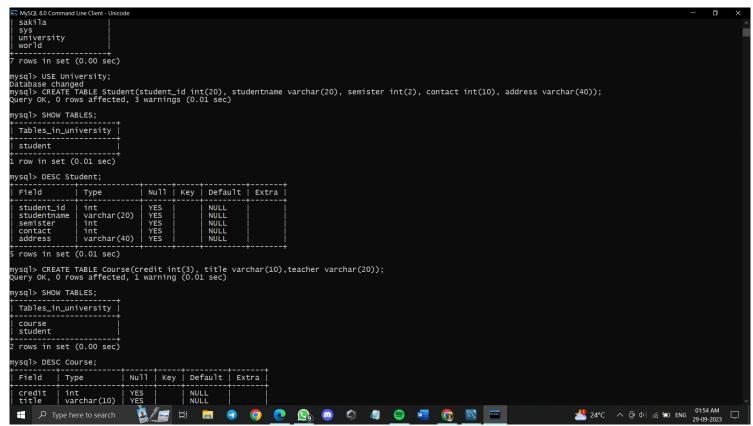**Submitted on: 27/09/2023**

Problem Statement:

create, alter, drop, rename, truncate, description(All Basic commands: show: databases, tables, use database, create tables, drop: database, tables, description of table)
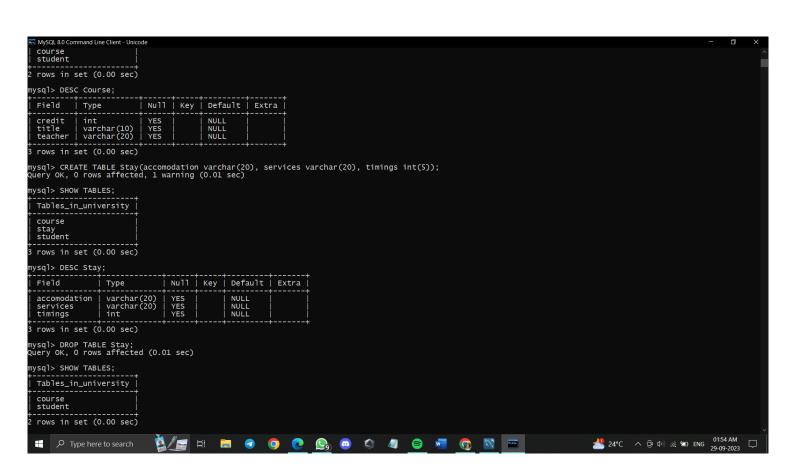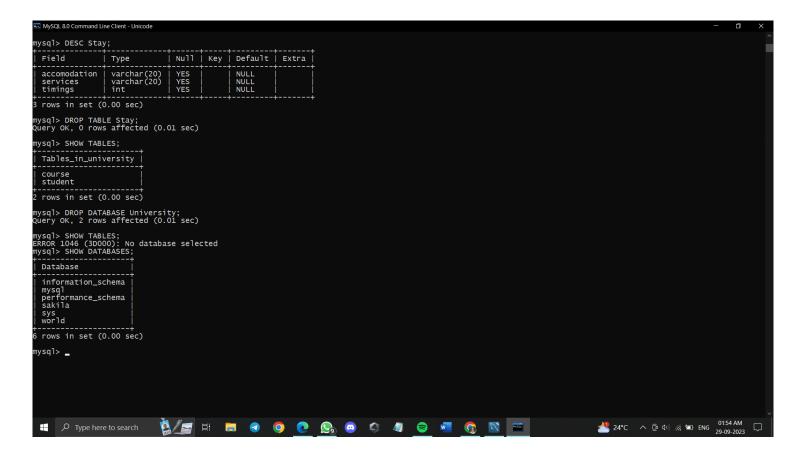
Code:

```
MySQL 8.0 Command Line Client - Unicode
Enter password: **********
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.34 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> SHOW DATABASE;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'DAT
ABASE' at line 1
mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sakila             |
| sys                |
| world              |
+--------------------+
6 rows in set (0.00 sec)

mysql> CREATE DATABASE University;
Query OK, 1 row affected (0.00 sec)

mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sakila             |
| sys                |
| university         |
| world              |
+--------------------+
7 rows in set (0.00 sec)

mysql> USE University;
Database changed
mysql> CREATE TABLE Student(student_id int(20), studentname varchar(20), semister int(2), contact int(10), address varchar(40));
Query OK, 0 rows affected, 3 warnings (0.01 sec)
```

```
| sakila     |
| sys        |
| university |
| world      |
+--------------------+
7 rows in set (0.00 sec)

mysql> USE University;
Database changed
mysql> CREATE TABLE Student(student_id int(20), studentname varchar(20), semister int(2), contact int(10), address varchar(40));
Query OK, 0 rows affected, 3 warnings (0.01 sec)

mysql> SHOW TABLES;
+--------------------+
| Tables_in_university |
+--------------------+
| student            |
+--------------------+
1 row in set (0.01 sec)

mysql> DESC Student;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| student_id  | int         | YES  |     | NULL    |       |
| studentname | varchar(20) | YES  |     | NULL    |       |
| semister    | int         | YES  |     | NULL    |       |
| contact     | int         | YES  |     | NULL    |       |
| address     | varchar(40) | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
5 rows in set (0.01 sec)

mysql> CREATE TABLE Course(credit int(3), title varchar(10),teacher varchar(20));
Query OK, 0 rows affected, 1 warning (0.01 sec)

mysql> SHOW TABLES;
+--------------------+
| Tables_in_university |
+--------------------+
| course             |
| student            |
+--------------------+
2 rows in set (0.00 sec)

mysql> DESC Course;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| credit | int         | YES  |     | NULL    |       |
| title  | varchar(10) | YES  |     | NULL    |       |
```

```
| course     |
| student    |
+--------------------+
2 rows in set (0.00 sec)

mysql> DESC Course;
+---------+-------------+------+-----+---------+-------+
| Field   | Type        | Null | Key | Default | Extra |
+---------+-------------+------+-----+---------+-------+
| credit  | int         | YES  |     | NULL    |       |
| title   | varchar(10) | YES  |     | NULL    |       |
| teacher | varchar(20) | YES  |     | NULL    |       |
+---------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)

mysql> CREATE TABLE Stay(accomodation varchar(20), services varchar(20), timings int(5));
Query OK, 0 rows affected, 1 warning (0.01 sec)

mysql> SHOW TABLES;
+--------------------+
| Tables_in_university |
+--------------------+
| course             |
| stay               |
| student            |
+--------------------+
3 rows in set (0.00 sec)

mysql> DESC Stay;
+--------------+-------------+------+-----+---------+-------+
| Field        | Type        | Null | Key | Default | Extra |
+--------------+-------------+------+-----+---------+-------+
| accomodation | varchar(20) | YES  |     | NULL    |       |
| services     | varchar(20) | YES  |     | NULL    |       |
| timings      | int         | YES  |     | NULL    |       |
+--------------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)

mysql> DROP TABLE Stay;
Query OK, 0 rows affected (0.01 sec)

mysql> SHOW TABLES;
+--------------------+
| Tables_in_university |
+--------------------+
| course             |
| student            |
+--------------------+
2 rows in set (0.00 sec)
```

```
mysql> DESC Stay;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| accomodation| varchar(20) | YES  |     | NULL    |       |
| services    | varchar(20) | YES  |     | NULL    |       |
| timings     | int         | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)

mysql> DROP TABLE Stay;
Query OK, 0 rows affected (0.01 sec)

mysql> SHOW TABLES;
+---------------------+
| Tables_in_university |
+---------------------+
| course              |
| student             |
+---------------------+
2 rows in set (0.00 sec)

mysql> DROP DATABASE University;
Query OK, 2 rows affected (0.01 sec)

mysql> SHOW TABLES;
ERROR 1046 (3D000): No database selected
mysql> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| sakila             |
| sys                |
| world              |
+--------------------+
6 rows in set (0.00 sec)

mysql> _
```

Post Lab Questions:

SQL- DDL Commands

Create, alter, drop, rename, truncate, description (All Basic Commands: show: databases, tables, use database, create tables, drop: database, tables, description of table)

① Create Database-

CREATE DATABASE database_name;

→ This command is used to create a new database in a database management system (DBMS)

② ALTER DATABASE:

ALTER DATABASE database_name [modification_options];

→ Used to ~~delete~~ modify an existing database, such as changing its name or character set.

③ DROP DATABASE:

DROP DATABASE database_name;

→ Used to delete an existing database and its associated data permanently.

④ RENAME DATABASE:

RENAME DATABASE old_database_name
                  to new_database_name

→ Used to rename an existing database

⑤ TRUNCATE TABLE:

TRUNCATE TABLE table_name;

→ Used to remove all rows from a table
while keeping the table structure intact

⑥ CREATE TABLE:

CREATE TABLE table_name(
        column1 datatype1,
        column2 datatype2,
        ......
    );

⑦ ALTER TABLE:

ALTER TABLE table_name [modification
                          _options];

→ Used to modify an existing table's
structure, such as adding, modifying
, or dropping columns.

(8) DROP TABLE:

DROP TABLE table_name;

→ This command is used to delete an existing table and all its data permanently.

(9) SHOW DATABASES;

SHOW DATABASES;

→ Used to list all the databases available in the current DBMS.

(10) SHOW TABLES:

SHOW TABLES;

→ Used to list all the tables in the currently selected database.

(11) USE DATABASE:

USE database_name;

→ Used to select a specific database for further operations.

⑫ DESCRIBE TABLE
(or DESCRIBE or SHOW COLUMNS FROM)

DESCRIBE table _name;

→ used to display information about the columns and their data types in a specific table.

18/9/25 , o/p , chops byte