



Green University of Bangladesh
Department of Computer Science and Engineering(CSE)
Faculty of Sciences and Engineering
Semester: (Spring, Year:2021), B.Sc. in CSE (Day)

LAB REPORT NO #1
Course Title:Database System lab
Course Code:CSE210 Section:PC-193D

Lab Experiment Name:Managing MySQL Databases and tables.

Student Details

Name		ID
1.	Jahid Hasan	193902001

Lab Date : 28.06.2021
Submission Date : 28.06.2021
Course Teacher's Name : MD. Moshir Rahman

[For Teachers use only: **Don't Write Anything inside this box**]

<u>Lab Report Status</u>	
Marks:	Signature:

Comments:	Date:
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❖ Objective:

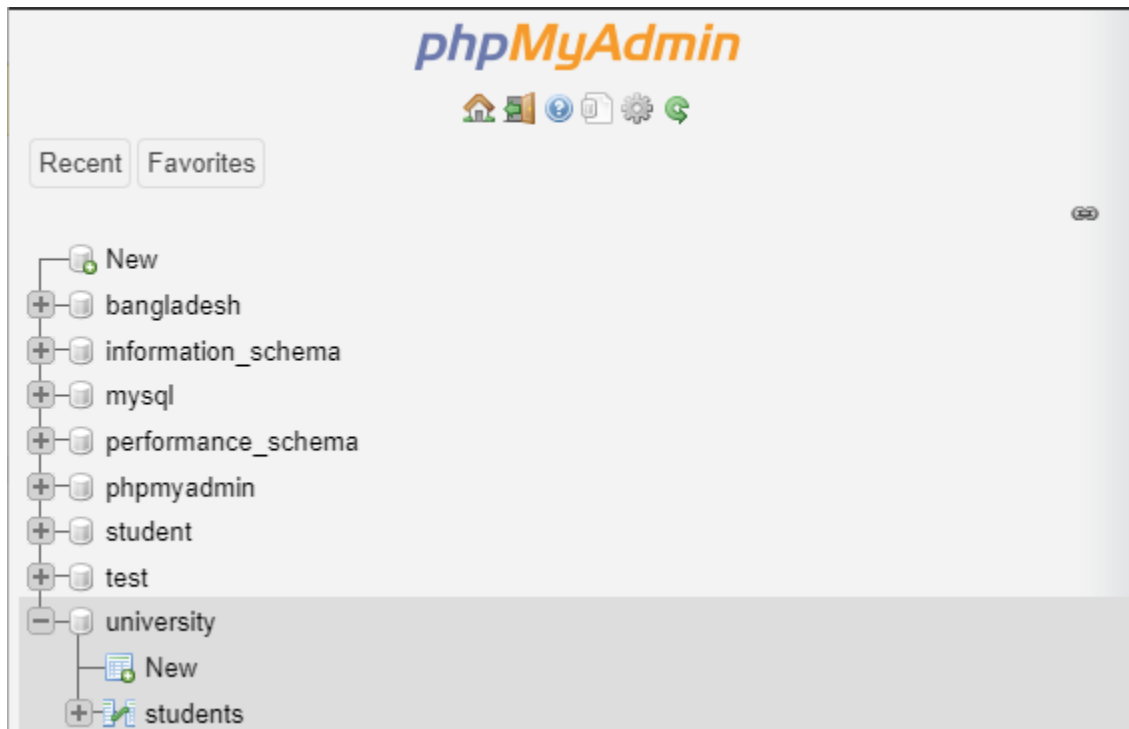
We will understand how to insert, update and delete data from within a table by using Database management software.

❖ Procedure:

- (i) Use insert command.
- (ii) Use Select command.
- (iii) Use Select command with where condition.
- (iv) Use Select command with order by clause.
- (v) Use Select command with operators.
- (vi) Use Select command with DISTINCT keyword.
- (vii) Use Select command with group by clause .
- (viii) Use Update command.
- (ix) Use Update command .
- (x) Use Delete command .
- (xi) Use select command with group by and having clause.

❖ Creating a database and inserting the records:

At first we will create the database by using the command **CREATE DATABASE university.**



Here, creating row of ID,Name,Age,CGPA,City of the table named student:

```
1 CREATE TABLE students
2 (
3     ID int(20),
4     Name varchar(30),
5     CGPA double(5,3),
6     Age int(4),
7     City varchar(20)
8 )
9 );
```

ID	Name	CGPA	Age	City
----	------	------	-----	------

Now inserting a record of a single student:

```
1 INSERT INTO students
2 (ID,Name,Age,CGPA,City)
3 VALUES(193902001,'Jahid Hasan',22,3.47,'Dhaka');
```

+ Options

ID	Name	CGPA	Age	City
193902001	Jahid Hasan	3.470	22	Dhaka

Insert the records of multiple students at once:

```

1 INSERT INTO students
2 VALUES
3 (193902022,'Fahim AL Haq',21,3.95,'Airport'),
4 (193902031,'Mohammad Nazmul Hossain',22,3.50,'Dhaka');
5

```

+ Options

ID	Name	Age	CGPA	City
193902001	Jahid Hasan	22	3.470	Dhaka
193902022	Fahim AL Haq	4	21.000	Airport
193902031	Mohammad Nazmul Hossain	4	22.000	Dhaka
193902022	Fahim AL Haq	21	3.950	Airport
193903031	Mohammad Nazmul Hossain	22	3.500	Dhaka

Now we will perform search operation in the database:

```

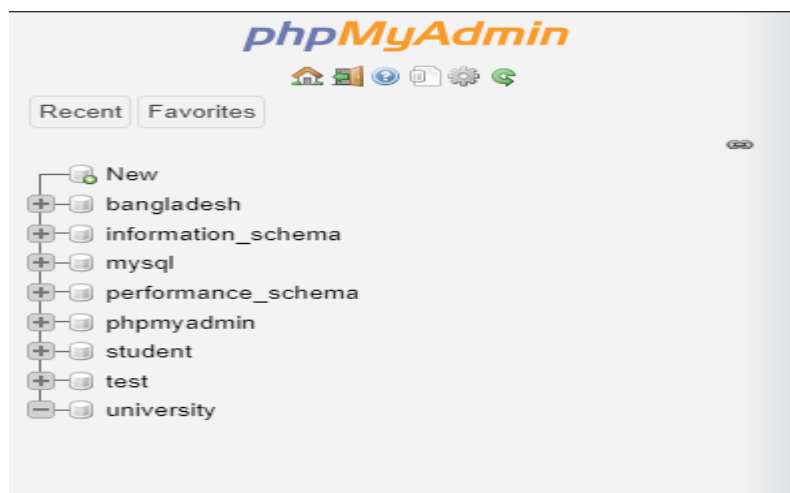
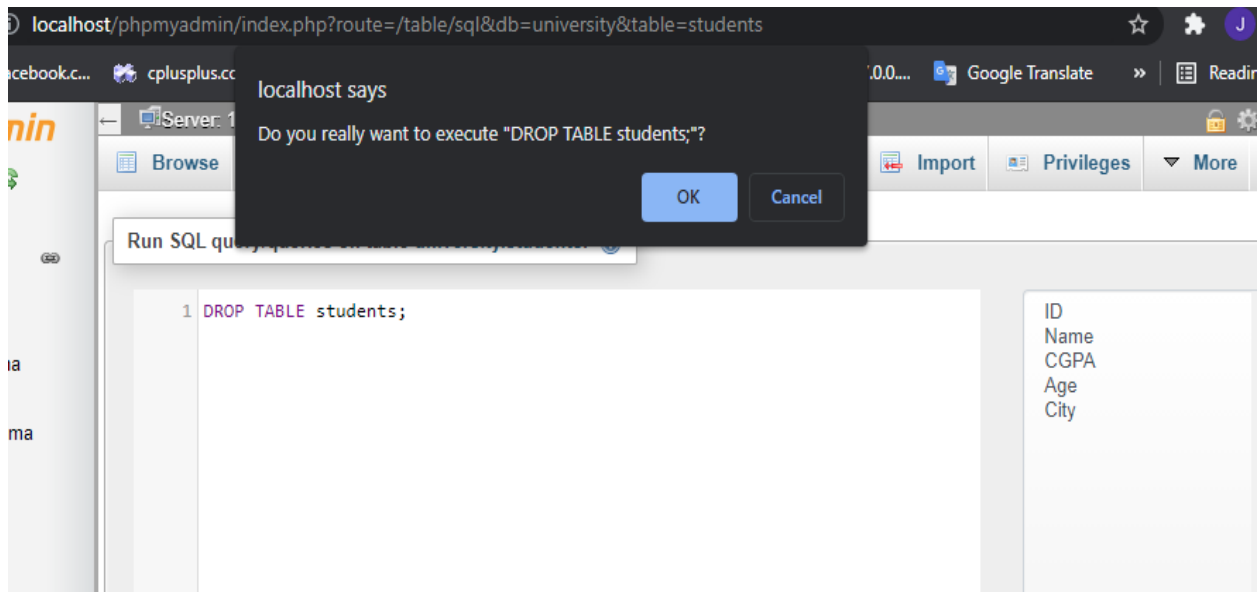
1 SELECT * FROM students WHERE ID = 193902001;

```

ID	Name	Age	CGPA	City
193902001	Jahid Hasan	22	3.470	Dhaka

Now, delete operation on our database :

```
1 DROP TABLE students;
```



Now we can see that the table name students has been successfully deleted.

Now we will access the database from the command prompt(cmd):

First of all we will enter into xampp folder which is located in the C:drive by the following command :

```
Microsoft Windows [Version 10.0.19043.1081]
(c) Microsoft Corporation. All rights reserved.

C:\Users\Tech Land>cd \

C:\>cd xampp

C:\xampp>mysql
'mysql' is not recognized as an internal or external command,
operable program or batch file.

C:\xampp>cd mysql

C:\xampp\mysql>bin
'bin' is not recognized as an internal or external command,
operable program or batch file.

C:\xampp\mysql>cd bin

C:\xampp\mysql\bin>mysql
ERROR 1045 (28000): Access denied for user 'Tech Land'@'localhost' (using password: NO)

C:\xampp\mysql\bin>mysql -u root -p -h localhost
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 1375
Server version: 10.4.19-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

Here is a demo that we have successfully to the mysql server :

```
MariaDB [(none)]> show database;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'database' at line 1
MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| bangladesh |
| information_schema |
| mysql |
| performance_schema |
| phmyadmin |
| student |
| test |
| university |
+-----+
8 rows in set (0.001 sec)
```

Create DATABASE & TABLE:

```
MariaDB [(none)]> CREATE DATABASE university;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '' at line 1
MariaDB [(none)]> CREATE DATABASE universitys;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> use universitys;
Database changed
MariaDB [universitys]> CREATE TABLE;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '' at line 1
MariaDB [universitys]> INSERT INTO students VALUES(193902001,'Jahid',22,3.47,'Narayangonj'),(193902022,'Fahim',21,3.95,'Dhaka');
ERROR 1146 (42S02): Table 'universitys.students' doesn't exist
MariaDB [universitys]> CREATE TABLE students(ID int(10),Name varchar(33),Age int(4),CGPA double(4,3),City varchar(22));
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near '' at line 1
MariaDB [universitys]> CREATE TABLE students(ID int(10),Name varchar(33),Age int(4),CGPA double(4,3),City varchar(22));
Query OK, 0 rows affected (0.147 sec)
```

Now we will insert multiple records in our table which is students by the following command prompt:

```
MariaDB [universitys]> INSERT INTO students VALUES(193902001,'Jahid',22,3.47,'Narayangonj'),(193902022,'Fahim',21,3.95,'Dhaka');
Query OK, 2 rows affected (0.045 sec)
Records: 2 Duplicates: 0 Warnings: 0

MariaDB [universitys]> SELECT * FROM students WHERE ID = 193902001;
+-----+-----+-----+-----+-----+
| ID      | Name   | Age  | CGPA | City      |
+-----+-----+-----+-----+-----+
| 193902001 | Jahid  | 22   | 3.470 | Narayangonj |
+-----+-----+-----+-----+-----+
1 row in set (0.000 sec)
```

We can also drop the table by using command prompt:

```
MariaDB [universitys]> DROP DATABASE university;  
Query OK, 0 rows affected (0.002 sec)  
  
MariaDB [universitys]> _
```

❖ ANALYSIS AND DISCUSSION:

The DML commands are executed successfully. In this lab we have learned to create a database, insert data, search data and delete data of the records from the database. In addition to that, We have also accessed the database through command prompt.