



Mawlana Bhashani Science and Technology University

Lab-Report

Report No: 05

Course code: ICT-3110

Course title: Operating Systems Lab

Date of Performance: 09-09-2020

Date of Submission: 19-09-2020

Submitted by

Name: Sabikun Nahar Piya

ID: IT-18020

3rd year 1st semester

Session: 2017-2018

Dept. of ICT

MBSTU.

Submitted To

Nazrul Islam

Assistant Professor

Dept. of ICT

MBSTU.

Experiment No:05

Experiment Name:Connecting a database(MYSQL)with Linux

Objectives:

From this lab,we learnt about how to

- i) Install MySQL on Ubuntu
- ii) Log into MySQL by Linux.
- iii) Create database table.
- iv) Insert data into table.
- v) Describe table.
- vi) Alter table.
- vii) Drop data from table.
- viii) Update data of table.
- ix) Where and delete operation.

Connecting a database (MySQL) with linux

1. Install MySQL on Ubuntu .

```
sudo apt-get update
sudo apt-get install mysql-server
mysql_secure_installation
```

2. Log into mysql by linux ubuntu.

```
piya@DESKTOP-JTFNBK:~$ sudo mysql -u root
[sudo] password for piya:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 13
Server version: 8.0.21-0ubuntu0.20.04.4 (Ubuntu)

Copyright (c) 2000, 2020, Oracle and/or its affiliates. All rights reserved.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

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

3. show and create database :

```
mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql       |
| new1        |
| performance_schema |
| sys         |
+-----+
5 rows in set (0.00 sec)

mysql> create database piya;
Query OK, 1 row affected (0.04 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql       |
| new1        |
| performance_schema |
| piya        |
| sys         |
+-----+
5 rows in set (0.00 sec)
```

4. show and create table :

```
mysql> CREATE TABLE STUDENT(
-> NAME VARCHAR (50) NOT NULL,
-> ID VARCHAR (50) NOT NULL,
-> DEPT VARCHAR (50) NOT NULL,
-> AGE INT (5) NOT NULL);
Query OK, 0 rows affected, 1 warning (0.92 sec)

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

mysql> describe STUDENT;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| NAME  | varchar(50)   | NO   |     | NULL    |       |
| ID    | varchar(50)   | NO   |     | NULL    |       |
| DEPT  | varchar(50)   | NO   |     | NULL    |       |
| AGE   | int           | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.04 sec)
```

5. insert data into table :

```
mysql> insert into STUDENT(NAME,ID,DEPT,AGE)values('Maira','IT-18020','ICT',22);
Query OK, 1 row affected (0.06 sec)

mysql> insert into STUDENT(NAME,ID,DEPT,AGE)values('Tethye','IT-18055','ICT',21);
Query OK, 1 row affected (0.04 sec)

mysql> insert into STUDENT(NAME,ID,DEPT,AGE)values('Jui','IT-18039','ICT',21);
Query OK, 1 row affected (0.02 sec)

mysql> select *from STUDENT;
+-----+-----+-----+-----+
| NAME  | ID        | DEPT | AGE |
+-----+-----+-----+-----+
| Maira | IT-18020  | ICT  | 22  |
| Tethye | IT-18055 | ICT  | 21  |
| Jui   | IT-18039  | ICT  | 21  |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

6. Describe table:

```
mysql> describe STUDENT;
```

Field	Type	Null	Key	Default	Extra
NAME	varchar(50)	NO		NULL	
ID	varchar(50)	NO		NULL	
DEPT	varchar(50)	NO		NULL	
AGE	int	NO		NULL	

```
4 rows in set (0.04 sec)
```

7. alter table :

```
mysql> alter table STUDENT add DISTRICT varchar(20);
Query OK, 0 rows affected (0.30 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> describe STUDENT;
```

Field	Type	Null	Key	Default	Extra
NAME	varchar(50)	NO		NULL	
ID	varchar(50)	NO		NULL	
DEPT	varchar(50)	NO		NULL	
AGE	int	NO		NULL	
DISTRICT	varchar(20)	YES		NULL	

```
5 rows in set (0.00 sec)
```

8. drop data from table:

```
mysql> alter table STUDENT drop DISTRICT;
Query OK, 0 rows affected (0.99 sec)
Records: 0 Duplicates: 0 Warnings: 0

mysql> describe STUDENT;
```

Field	Type	Null	Key	Default	Extra
NAME	varchar(50)	NO		NULL	
ID	varchar(50)	NO		NULL	
DEPT	varchar(50)	NO		NULL	
AGE	int	NO		NULL	

```
4 rows in set (0.00 sec)
```

09.update data of table:

```
mysql> update STUDENT
-> set AGE=20
-> where NAME='jui';
Query OK, 1 row affected (0.03 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select *from STUDENT;
+-----+-----+-----+-----+
| NAME  | ID      | DEPT  | AGE  |
+-----+-----+-----+-----+
| Maira | IT-18020 | ICT   | 22   |
| Tethye | IT-18055 | ICT   | 21   |
| Jui   | IT-18039 | ICT   | 20   |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

10.delete data from table:

```
mysql> delete from STUDENT where NAME='Tethye';
Query OK, 1 row affected (0.02 sec)

mysql> select *from STUDENT;
+-----+-----+-----+-----+
| NAME  | ID      | DEPT  | AGE  |
+-----+-----+-----+-----+
| Maira | IT-18020 | ICT   | 22   |
| Jui   | IT-18039 | ICT   | 20   |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> _
```