



Mawlana Bhashani Science and Technology University

Lab-Report

Lab Report No: 05

Lab Report Name: Connecting a database (MySQL) with Linux .

Course code: ICT-3110

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Submitted by

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Experiment No: 05

Experiment Name: Connecting a database (MySQL) with Linux .

- Install MySQL on Ubuntu-

sudo apt-get install mysql-server

```
masud@masud-VirtualBox:~$ sudo apt-get install mysql-server
Reading package lists... Done
Building dependency tree
Reading state information... Done
mysql-server is already the newest version (5.7.31-0ubuntu0.18.04.1).
0 upgraded, 0 newly installed, 0 to remove and 354 not upgraded.
```

2.Log into mysql-

```
masud@masud-VirtualBox:~$ sudo mysql
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 4
Server version: 5.7.31-0ubuntu0.18.04.1 (Ubuntu)

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

mysql> █
```

3. Create database table-

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

mysql> create database masudrana;
Query OK, 1 row affected (0.00 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| masud          |
| masudrana       |
| milon          |
| mysql          |
| performance_schema |
| sys            |
+-----+
7 rows in set (0.00 sec)
```

4. Insert data into table-

```
mysql> insert into bird values('Masud Rana','18002','3.50');
Query OK, 1 row affected (0.05 sec)

mysql> select * from bird;
+-----+-----+-----+
| Name      | Id    | Cgpa |
+-----+-----+-----+
| Masud Rana | 18002 | 3.50 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

5. Describe table-

```
mysql> describe bird;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Name  | varchar(50)   | YES  |     | NULL    |       |
| Id    | int(10)       | YES  |     | NULL    |       |
| Cgpa  | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> 
```

6. alter table-

```
mysql> alter table bird add Dept varchar(20);
Query OK, 0 rows affected (0.16 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> describe bird;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Name  | varchar(50)   | YES  |     | NULL    |       |
| Id    | int(10)       | YES  |     | NULL    |       |
| Cgpa  | varchar(20)   | YES  |     | NULL    |       |
| Dept  | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```


7. modify table-

```
mysql> alter table bird modify id varchar(10);
Query OK, 1 row affected (0.25 sec)
Records: 1  Duplicates: 0  Warnings: 0

mysql> describe bird;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Name  | varchar(50)   | YES  |     | NULL    |       |
| id    | varchar(10)   | YES  |     | NULL    |       |
| Cgpa  | varchar(20)   | YES  |     | NULL    |       |
| Dept  | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> 
```

8. drop data from table-

```
mysql> describe bird;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Name  | varchar(50)   | YES  |     | NULL    |       |
| id    | varchar(10)   | YES  |     | NULL    |       |
| Cgpa  | varchar(20)   | YES  |     | NULL    |       |
| Dept  | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> alter table bird drop Cgpa;
Query OK, 0 rows affected (0.14 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> describe bird;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| Name  | varchar(50)   | YES  |     | NULL    |       |
| id    | varchar(10)   | YES  |     | NULL    |       |
| Dept  | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

9. update data of table-

```
mysql> select * from bird;
+-----+-----+-----+
| Name      | id    | cgpa |
+-----+-----+-----+
| Masud Rana | 18002 | NULL |
| Tanvir Ahmed | 18043 | NULL |
| Milon Ahmed | 18034 | NULL |
+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> update bird set name='Amir' where id =18002;
Query OK, 1 row affected (0.19 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from bird;
+-----+-----+-----+
| Name      | id    | cgpa |
+-----+-----+-----+
| Amir      | 18002 | NULL |
| Tanvir Ahmed | 18043 | NULL |
| Milon Ahmed | 18034 | NULL |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

10. Where and delete operation-

```
mysql> select * from bird;
+-----+-----+-----+
| Name      | id    | cgpa |
+-----+-----+-----+
| Tanvir Ahmed | 18043 | NULL |
| Milon Ahmed | 18034 | NULL |
+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> delete from bird where name='Tanvir Ahmed';
Query OK, 1 row affected (0.07 sec)

mysql> select * from bird;
+-----+-----+-----+
| Name      | id    | cgpa |
+-----+-----+-----+
| Milon Ahmed | 18034 | NULL |
+-----+-----+-----+
1 row in set (0.00 sec)
```

Discussion: In this lab is we learn how connecting database with linux. For connecting database at first we install mysql server and log into mysql. After that we create database and table. Then we insert the value and then we use different commands for different purposes.