Mawlana Bhashani Science and Technology University
Lab-Report

Report No: 05
Course code: ICT-3108
Course title: Operating System Lab
Date of Performance:10-09-20
Date of Submission:14-09-20

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3th year 1ndsemester
Session: 2017-2018
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Lab Report No : 05

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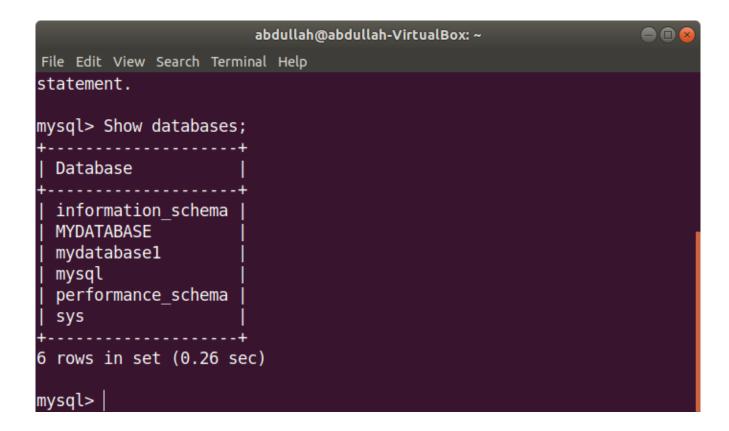
Theory

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) Modify table.
viii) Drop data from table.
ix) Update data of table.
x) Where and delete operation.

Log into MySQL by Linux.

```
abdullah@abdullah-VirtualBox: ~

File  Edit  View  Search  Terminal  Help
abdullah@abdullah-VirtualBox:~$ sudo mysql -u root
[sudo] password for abdullah:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 2
Server version: 5.7.31-0ubuntu0.18.04.1 (Ubuntu)

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owners.

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

mysql>
```

Show Database

```
abdullah@abdullah-VirtualBox: ~

File  Edit  View  Search  Terminal  Help
statement.

mysql> Show databases;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| MYDATABASE         |
| mydatabase1        |
| mysql              |
| performance_schema |
| sys                |
+--------------------+
6 rows in set (0.26 sec)

mysql>
```

Create database

create table

insert data into table

```
abdullah@abdullah-VirtualBox: ~

File  Edit  View  Search  Terminal  Help
+-------------------+
6 rows in set (0.26 sec)

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

mysql> use bookstore;
Database changed
mysql> create table books (name varchar(20),price int ,writer varcha
r(20));
Query OK, 0 rows affected (0.39 sec)

mysql> insert into books values('math',123,'abdullah');
Query OK, 1 row affected (0.04 sec)

mysql>
```

Show table

```
                       abdullah@abdullah-VirtualBox: ~

File  Edit  View  Search  Terminal  Help
Query OK, 1 row affected (0.04 sec)

mysql> insert into books values('operating system',623,'mamus');
Query OK, 1 row affected (0.00 sec)

mysql> mysql> select *from books;
ERROR 1064 (42000): You have an error in your SQL syntax; check the
manual that corresponds to your MySQL server version for the right s
yntax to use near 'frct *from books' at line 1
mysql> select *from books;
+------------------+-------+----------+
| name             | price | writer   |
+------------------+-------+----------+
| math             |   123 | abdullah |
| java             |  3123 | sadheen  |
| operating system |   623 | mamus    |
+------------------+-------+----------+
3 rows in set (0.00 sec)

mysql>
```

Describe Table

```
                    abdullah@abdullah-VirtualBox: ~

File  Edit  View  Search  Terminal  Help
+-------------------+-------+----------+
| name              | price | writer   |
+-------------------+-------+----------+
| math              |   123 | abdullah |
| java              |  3123 | sadheen  |
| operating system  |   623 | mamus    |
+-------------------+-------+----------+
3 rows in set (0.00 sec)

mysql> describe  books;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| name   | varchar(20) | YES  |     | NULL    |       |
| price  | int(11)     | YES  |     | NULL    |       |
| writer | varchar(20) | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
3 rows in set (0.01 sec)

mysql>
```

Drop data from table

```
| price   | int(11)      | YES |    | NULL    |    |
| writer  | varchar(20)  | YES |    | NULL    |    |
+--------+-------------+------+-----+---------+-------+
3 rows in set (0.01 sec)

mysql> alter table books drop writer;
Query OK, 0 rows affected (0.09 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> select *from books;
+------------------+-------+
| name             | price |
+------------------+-------+
| math             |   123 |
| java             |  3123 |
| operating system |   623 |
+------------------+-------+
3 rows in set (0.00 sec)

mysql>
```

Alter table

```
                        abdullah@abdullah-VirtualBox: ~
File  Edit  View  Search  Terminal  Help
| java               |  3123 |
| operating system   |   623 |
+--------------------+-------+
3 rows in set (0.00 sec)

mysql> alter table books add publicant varchar(12);
Query OK, 0 rows affected (0.21 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> select *from books;
+--------------------+-------+-----------+
| name               | price | publicant |
+--------------------+-------+-----------+
| math               |   123 | NULL      |
| java               |  3123 | NULL      |
| operating system   |   623 | NULL      |
+--------------------+-------+-----------+
3 rows in set (0.00 sec)

mysql>
```

Delete data, update data, where

```
                        abdullah@abdullah-VirtualBox: ~

File  Edit  View  Search  Terminal  Help
| java              |   3123 | NULL      |
| operating system |    623 | NULL      |
+------------------+-------+-----------+
3 rows in set (0.00 sec)

mysql> delete from books where name= java;
ERROR 1054 (42S22): Unknown column 'java' in 'where clause'
mysql> delete from books where name='java';
Query OK, 1 row affected (0.05 sec)

mysql> update books set where name='operating system' where name='matnmysql>
 updateupdate books set where name='operating system' where name='math';
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual t
hat corresponds to your MySQL server version for the right syntax to use nea
r 'where name='operating system' where name='math'' at line 1
mysql> update books set  name='phy' where name='math';
Query OK, 1 row affected (0.04 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql>
```

Discussion :

Connect To MySQL Database From Command Line

1. Log in to your A2 Hosting account using SSH.
2. At the command line, type the following command, replacing USERNAME with your
   username: mysql -u USERNAME -p.
3. At the Enter Password prompt, type your password. ...
4. To display a list of databases, type the following command at the mysql> prompt: