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Section: 07

Course Code: 370

Course Name: Database Systems

#mysql -u root -p

#show databases;

```
XAMPP for Windows - mysql -u root -p
Setting environment for using XAMPP for Windows.
User@MSI e:\xampp
# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 8
Server version: 10.4.27-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.
MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| phpmyadmin |
| test |
+-----+
5 rows in set (0.013 sec)

MariaDB [(none)]>
```

1.

#create database Project_Database;

#show databases;

```
MariaDB [(none)]> create database Project_Database;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| phpmyadmin |
| project_database |
| test |
+-----+
6 rows in set (0.000 sec)

MariaDB [(none)]> .
```

```
#use Project_Database;

#create table Developers

#(

member_id int,

name varchar(30),

email varchar(60),

influence_count char(6),

Joining_date date,

multiplier int

);
```

```
MariaDB [(none)]> use Project_Database;
Database changed
MariaDB [Project_Database]> create table Developers
-> (
-> member_id int,
-> name varchar(30),
-> email varchar(60),
-> influence_count char(6),
-> joining_date date,
-> multiplier int
-> );
Query OK, 0 rows affected (0.513 sec)
```

```
#describe Developers;
```

```
MariaDB [Project_Database]> describe Developers;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| member_id | int(11) | YES | | NULL | |
| name | varchar(30) | YES | | NULL | |
| email | varchar(60) | YES | | NULL | |
| influence_count | char(6) | YES | | NULL | |
| joining_date | date | YES | | NULL | |
| multiplier | int(11) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.009 sec)

MariaDB [Project_Database]> _
```

#insert into Developers

```
values('1','Taylor Otwell','otwell@laravel.com','739360','2020-6-10',10),('2','Ryan
Dahl','ryan@nodejs.org','633632','2020-04-22',10),('3','Brendan
Eich','eich@javascript.com','939570','2020-05-07',8),('5','Evan
You','you@vuejs.org','982630','2020-06-11',7),('6','Rasmus
Lerdorf','lerdorf@php.net','937927','2020-06-3',8),('7','Guido van
Rossum','guido@python.org','968827','2020-07-18',19),('8','Adrian
Holovaty','adrian@django project.com','570724','2020-05-07',5),('9','Simon
Willison','simon@django project.com','864615','2020-04-30',4),('10','James
Gosling','james@java.com','719491','2020-05-18',5),('11','Rod
Johnson','rod@spring.io','601744','2020-05-18',7),('12','Satoshi
Nakamoto','nakamoto@blockchain.com','630488','2020-05-10',10);
```

```
MariaDB [Project_Database]> insert into Developers
-> values('1','Taylor Otwell','otwell@laravel.com','739360','2020-6-10',10),('2','Ryan Dahl','ryan@nodejs.org','633632','2020-04-22',10),('3','Brendan Eich','eich@javascript.com','939570','2020-05-07',8),('5','Evan You','you@vuejs.org','982630','2020-06-11',7),('6','Rasmus Lerdorf','lerdorf@php.net','937927','2020-06-3',8),('7','Guido van Rossum','guido@python.org','968827','2020-07-18',19),('8','Adrian Holovaty','adrian@django project.com','570724','2020-05-07',5),('9','Simon Willison','simon@django project.com','864615','2020-04-30',4),('10','James Gosling','james@java.com','719491','2020-05-18',5),('11','Rod Johnson','rod@spring.io','601744','2020-05-18',7),('12','Satoshi Nakamoto','nakamoto@blockchain.com','630488','2020-05-10',10);
Query OK, 11 rows affected (0.518 sec)
Records: 11 Duplicates: 0 Warnings: 0
```

#select*from Developers;

```
MariaDB [Project_Database]> select*from Developers;
+-----+-----+-----+-----+-----+
| member_id | name | email | influence_count | joining_date | multiplier |
+-----+-----+-----+-----+-----+
| 1 | Taylor Otwell | otwell@laravel.com | 739360 | 2020-06-10 | 10 |
| 2 | Ryan Dahl | ryan@nodejs.org | 633632 | 2020-04-22 | 10 |
| 3 | Brendan Eich | eich@javascript.com | 939570 | 2020-05-07 | 8 |
| 5 | Evan You | you@vuejs.org | 982630 | 2020-06-11 | 7 |
| 6 | Rasmus Lerdorf | lerdorf@php.net | 937927 | 2020-06-03 | 8 |
| 7 | Guido van Rossum | guido@python.org | 968827 | 2020-07-18 | 19 |
| 8 | Adrian Holovaty | adrian@django project.com | 570724 | 2020-05-07 | 5 |
| 9 | Simon Willison | simon@django project.com | 864615 | 2020-04-30 | 4 |
| 10 | James Gosling | james@java.com | 719491 | 2020-05-18 | 5 |
| 11 | Rod Johnson | rod@spring.io | 601744 | 2020-05-18 | 7 |
| 12 | Satoshi Nakamoto | nakamoto@blockchain.com | 630488 | 2020-05-10 | 10 |
+-----+-----+-----+-----+-----+
11 rows in set (0.030 sec)

MariaDB [Project_Database]> _
```

2.

#ALTER TABLE Developers CHANGE influence_count followers int;

#select*from Developers;

```
MariaDB [Project_Database]> ALTER TABLE Developers CHANGE influence_count followers int;
Query OK, 11 rows affected (1.224 sec)
Records: 11 Duplicates: 0 Warnings: 0

MariaDB [Project_Database]> select*from Developers;
+-----+-----+-----+-----+-----+-----+
| member_id | name      | email                | followers | joining_date | multiplier |
+-----+-----+-----+-----+-----+-----+
| 1 | Taylor Otwell | otwell@laravel.com   | 739360    | 2020-06-10   | 10         |
| 2 | Ryan Dahl     | ryan@nodejs.org      | 633632    | 2020-04-22   | 10         |
| 3 | Brendan Eich | eich@javascript.com  | 939570    | 2020-05-07   | 8          |
| 5 | Evan You      | you@vuejs.org        | 982630    | 2020-06-11   | 7          |
| 6 | Rasmus Lerdorf | lerdorf@php.net      | 937927    | 2020-06-03   | 8          |
| 7 | Guido van Rossum | guido@python.org     | 968827    | 2020-07-18   | 19         |
| 8 | Adrian Holovaty | adrian@django-project.com | 570724    | 2020-05-07   | 5          |
| 9 | Simon Willison | simon@django-project.com | 864615    | 2020-04-30   | 4          |
| 10 | James Gosling | james@java.com        | 719491    | 2020-05-18   | 5          |
| 11 | Rod Johnson   | rod@spring.io         | 601744    | 2020-05-18   | 7          |
| 12 | Satoshi Nakamoto | nakamoto@blockchain.com | 630488    | 2020-05-10   | 10         |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.001 sec)

MariaDB [Project_Database]> _
```

3.

#UPDATE Developers SET followers=followers+10;

#select*from Developers;

```
MariaDB [Project_Database]> UPDATE Developers SET followers=followers+10;
Query OK, 11 rows affected (0.494 sec)
Rows matched: 11 Changed: 11 Warnings: 0

MariaDB [Project_Database]> select*from Developers;
+-----+-----+-----+-----+-----+-----+
| member_id | name      | email                | followers | joining_date | multiplier |
+-----+-----+-----+-----+-----+-----+
| 1 | Taylor Otwell | otwell@laravel.com   | 739370    | 2020-06-10   | 10         |
| 2 | Ryan Dahl     | ryan@nodejs.org      | 633642    | 2020-04-22   | 10         |
| 3 | Brendan Eich | eich@javascript.com  | 939580    | 2020-05-07   | 8          |
| 5 | Evan You      | you@vuejs.org        | 982640    | 2020-06-11   | 7          |
| 6 | Rasmus Lerdorf | lerdorf@php.net      | 937937    | 2020-06-03   | 8          |
| 7 | Guido van Rossum | guido@python.org     | 968837    | 2020-07-18   | 19         |
| 8 | Adrian Holovaty | adrian@django-project.com | 570734    | 2020-05-07   | 5          |
| 9 | Simon Willison | simon@django-project.com | 864625    | 2020-04-30   | 4          |
| 10 | James Gosling | james@java.com        | 719501    | 2020-05-18   | 5          |
| 11 | Rod Johnson   | rod@spring.io         | 601754    | 2020-05-18   | 7          |
| 12 | Satoshi Nakamoto | nakamoto@blockchain.com | 630498    | 2020-05-10   | 10         |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.000 sec)

MariaDB [Project_Database]> _
```

4.

#select name,email,followers from Developers;

```
MariaDB [Project_Database]> select name,email,followers from Developers;
+-----+-----+-----+
| name          | email                | followers |
+-----+-----+-----+
| Taylor Otwell | otwell@laravel.com   | 739370    |
| Ryan Dahl     | ryan@nodejs.org      | 633642    |
| Brendan Eich  | eich@javascript.com  | 939588    |
| Evan You      | you@vuejs.org        | 982640    |
| Rasmus Lerdorf | lerdorf@php.net      | 937937    |
| Guido van Rossum | guidop@python.org    | 968837    |
| Adrian Holovaty | adrian@django-project.com | 570734    |
| Simon Willison | simon@django-project.com | 864625    |
| James Gosling  | james@java.com       | 719501    |
| Rod Johnson    | rod@spring.io        | 601754    |
| Satoshi Nakamoto | nakamoto@blockchain.com | 630498    |
+-----+-----+-----+
11 rows in set (0.001 sec)
```

5.

#select name,(followers*100/1000000*multiplier*100/20)/100 as Efficiency from Developers;

```
MariaDB [Project_Database]> select name,(followers*100/1000000*multiplier*100/20)/100 as Efficiency from Developers;
+-----+-----+
| name          | Efficiency |
+-----+-----+
| Taylor Otwell | 36.96850000000000 |
| Ryan Dahl     | 31.68210000000000 |
| Brendan Eich  | 37.58120000000000 |
| Evan You      | 34.29240000000000 |
| Rasmus Lerdorf | 37.51740000000000 |
| Guido van Rossum | 92.03951500000000 |
| Adrian Holovaty | 14.26835000000000 |
| Simon Willison | 17.29250000000000 |
| James Gosling  | 17.98752500000000 |
| Rod Johnson    | 21.06130000000000 |
| Satoshi Nakamoto | 31.52490000000000 |
+-----+-----+
11 rows in set (0.298 sec)
```