

## Lab Assignment 01

```
XAMPP for Windows - mysql X + v
Setting environment for using XAMPP for Windows.
Asus@EMON c:\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: 10.4.32-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)]>
```

**1. Create the above table with the appropriate data type for each column.**

```
create database LAB_Assignment_1;
```

```
MariaDB [(none)]> create database LAB_Assignment_1;
Query OK, 1 row affected (0.001 sec)
```

```
use LAB_Assignment_1;
```

```
MariaDB [(none)]> use LAB_Assignment_1;
Database changed
```

```
create table Developers(member_id int, name varchar(30), email varchar(30),
influence_count int, joining_date date, multiplier int);
```

```

MariaDB [LAB_Assignment_1]> create table Developers(
  -> member_id int,
  -> name varchar(30),
  -> email varchar(30),
  -> influence_count int,
  -> joining_date date,
  -> multiplier int)
  -> ;
Query OK, 0 rows affected (0.005 sec)

```

Describe Developers;

```

MariaDB [LAB_Assignment_1]> describe Developers;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| member_id      | int(11)       | YES  |     | NULL    |       |
| name           | varchar(30)   | YES  |     | NULL    |       |
| email          | varchar(30)   | YES  |     | NULL    |       |
| influence_count | int(11)       | YES  |     | NULL    |       |
| joining_date   | date          | YES  |     | NULL    |       |
| multiplier     | int(11)       | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.007 sec)

```

insert into Developers values

```

(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),
(4, 'Evan You', 'you@vuejs.org', 982630, '2020-06-11', 7),
(5, 'Rasmus Lerdorf', 'lerdorf@php.net', 937927, '2020-06-03', 8),
(6, 'Guido van Rossum', 'guido@python.org', 968827, '2020-07-18', 19),
(7, 'Adrian Holovaty', 'adrian@django.com', 570724, '2020-05-07', 5),
(8, 'Simon Willison', 'simon@django.com', 864615, '2020-04-30', 4),
(9, 'James Gosling', 'james@java.com', 719491, '2020-05-18', 5),
(10, 'Rod Johnson', 'rod@spring.io', 601744, '2020-05-18', 7),
(11, 'Satoshi Nakamoto', 'nakamoto@blockchain.com', 630488, '2020-05-10', 10);

```

```
MariaDB [LAB_Assignment_1]> insert into Developers values
-> (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),
-> (4, 'Evan You', 'you@vuejs.org', 982630, '2020-06-11', 7),
-> (5, 'Rasmus Lerdorf', 'lerdorf@php.net', 937927, '2020-06-03', 8),
-> (6, 'Guido van Rossum', 'guido@python.org', 968827, '2020-07-18', 19),
-> (7, 'Adrian Holovaty', 'adrian@django project.com', 570724, '2020-05-07', 5),
-> (8, 'Simon Willison', 'simon@django project.com', 864615, '2020-04-30', 4),
-> (9, 'James Gosling', 'james@java.com', 719491, '2020-05-18', 5),
-> (10, 'Rod Johnson', 'rod@spring.io', 601744, '2020-05-18', 7),
-> (11, 'Satoshi Nakamoto', 'nakamoto@blockchain.com', 630488, '2020-05-10', 10);
Query OK, 11 rows affected (0.008 sec)
Records: 11 Duplicates: 0 Warnings: 0
```

**2. Change the column name "influence\_count". The new name should be "followers," and the data type should be integer.**

ALTER TABLE Developers CHANGE COLUMN influence\_count followers INT;

```
MariaDB [LAB_Assignment_1]> ALTER TABLE Developers CHANGE COLUMN followes followers INT;
Query OK, 0 rows affected (0.009 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

**3. Update the number of followers of each developer by +10.**

UPDATE Developers SET followers = followers + 10;

```
MariaDB [LAB_Assignment_1]> update Developers set followers = followers + 10;
Query OK, 11 rows affected (0.002 sec)
Rows matched: 11 Changed: 11 Warnings: 0
```

Select \* from Developers;

```
MariaDB [LAB_Assignment_1]> 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
4	Evan You	you@vuejs.org	982640	2020-06-11	7
5	Rasmus Lerdorf	lerdorf@php.net	937937	2020-06-03	8
6	Guido van Rossum	guido@python.org	968837	2020-07-18	19
7	Adrian Holovaty	adrian@django project.com	570734	2020-05-07	5
8	Simon Willison	simon@django project.com	864625	2020-04-30	4
9	James Gosling	james@java.com	719501	2020-05-18	5
10	Rod Johnson	rod@spring.io	601754	2020-05-18	7
11	Satoshi Nakamoto	nakamoto@blockchain.com	630498	2020-05-10	10

```
11 rows in set (0.000 sec)
```

**4. There is a formula to find the efficiency of the developers. Efficiency =**

**$((\text{followers} * 100 / 1000000) * (\text{multipliers} * 100 / 20)) / 100$ . Show the efficiency of each developer in a column named "Efficiency" along with their name.**

select name,  $((\text{followers} * 100 / 1000000) * (\text{multiplier} * 100 / 20)) / 100$  as Efficiency FROM Developers;

```
MariaDB [LAB_Assignment_1]> select name, ((followers*100/1000000) * (multiplier*100/20))/100 as Efficiency FROM Developers;
+-----+-----+
| name          | Efficiency |
+-----+-----+
| Taylor Otwell | 36.968500000000 |
| Ryan Dahl     | 31.682100000000 |
| Brendan Eich  | 37.583200000000 |
| Evan You      | 34.392400000000 |
| Rasmus Lerdorf | 37.517480000000 |
| Guido van Rossum | 92.039515000000 |
| Adrian Holovaty | 14.268350000000 |
| Simon Willison | 17.292500000000 |
| James Gosling  | 17.987525000000 |
| Rod Johnson    | 21.061390000000 |
| Satoshi Nakamoto | 31.524900000000 |
+-----+-----+
11 rows in set (0.001 sec)
```

**5. Show the name of the developers in UpperCase and the descending order of their Joining\_date.**

select upper(name) as name, joining\_date from Developers ORDER BY joining\_date DESC;

```
MariaDB [LAB_Assignment_1]> select upper(name) as name, joining_date from Developers ORDER BY joining_date DESC;
+-----+-----+
| name          | joining_date |
+-----+-----+
| GUIDO VAN ROSSUM | 2020-07-18 |
| EVAN YOU        | 2020-06-11 |
| TAYLOR OTWELL   | 2020-06-10 |
| RASMUS LERDORF  | 2020-06-03 |
| JAMES GOSLING   | 2020-05-18 |
| ROD JOHNSON     | 2020-05-18 |
| SATOSHI NAKAMOTO | 2020-05-10 |
| BRENDAN EICH    | 2020-05-07 |
| ADRIAN HOLOVATY | 2020-05-07 |
| SIMON WILLISON  | 2020-04-30 |
| RYAN DAHL       | 2020-04-22 |
+-----+-----+
11 rows in set (0.006 sec)
```

**6. Retrieve the member\_id, name, email and followers of the developers who have either ".com" or ".net" in their email address.**

select member\_id, name, email, followers from Developers where email LIKE '%.com%' OR email LIKE '%.net%';

```
MariaDB [LAB_Assignment_1]> select member_id, name, email, followers from Developers where email LIKE '%.com%' OR email LIKE '%.net%';
```

member_id	name	email	followers
1	Taylor Otwell	otwell@laravel.com	739370
3	Brendan Eich	eich@javascript.com	939580
5	Rasmus Lerdorf	lerdorf@php.net	937937
7	Adrian Holovaty	adrian@djangoproject.com	570734
8	Simon Willison	simon@djangoproject.com	864625
9	James Gosling	james@java.com	719501
11	Satoshi Nakamoto	nakamoto@blockchain.com	630498

```
7 rows in set (0.001 sec)
```