Lab Assignment 01 (CSE370)

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Section: 07

MySQL commands:
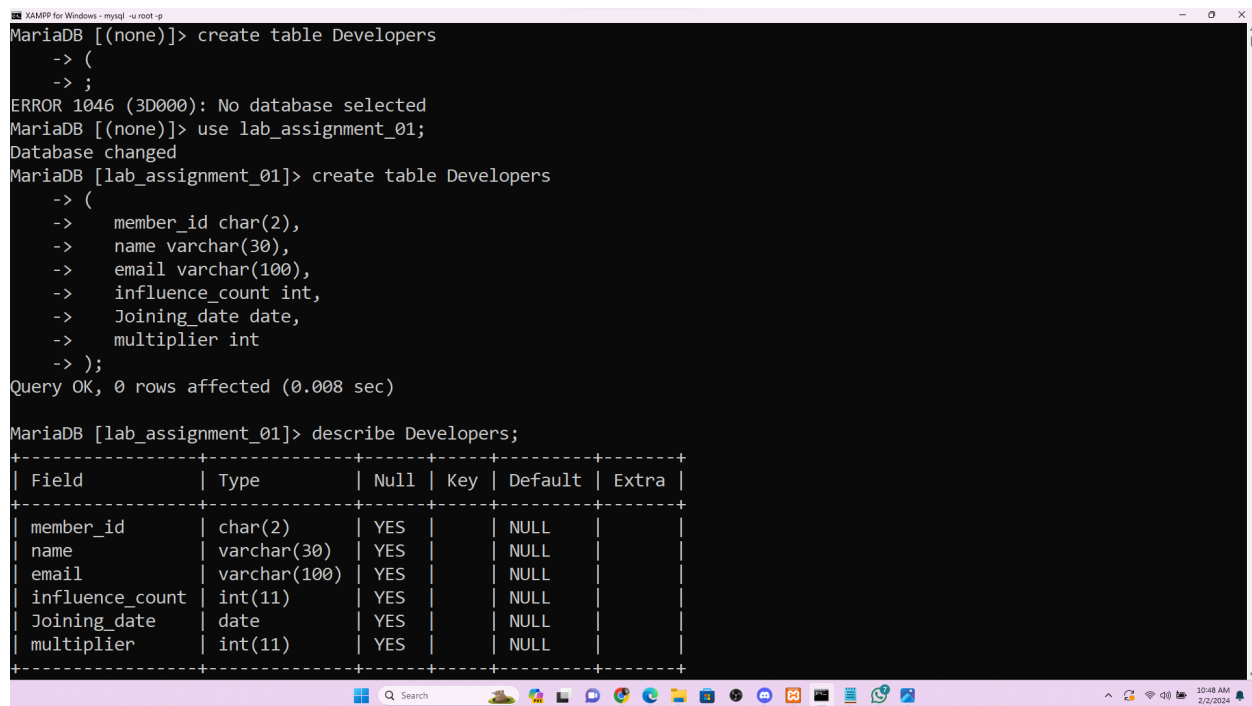- **mysql -u root -p**
- **""**
- **show databases;**
- **create database lab_assignment_01;**
- **use lab_assignment_01;**

#Task-01

- ● Create the above table with the appropriate data type for each column.

create table Developers
(
   member_id char(2),
   name varchar(30),
   email varchar(100),
   influence_count int,
   Joining_date date,
   multiplier int
);

```
XAMPP for Windows - mysql  -u root -p                                                    –   □   ×
MariaDB [(none)]> create table Developers
    -> (
    -> ;
ERROR 1046 (3D000): No database selected
MariaDB [(none)]> use lab_assignment_01;
Database changed
MariaDB [lab_assignment_01]> create table Developers
    -> (
    ->    member_id char(2),
    ->    name varchar(30),
    ->    email varchar(100),
    ->    influence_count int,
    ->    Joining_date date,
    ->    multiplier int
    -> );
Query OK, 0 rows affected (0.008 sec)

MariaDB [lab_assignment_01]> describe Developers;
+-----------------+--------------+------+-----+---------+-------+
| Field           | Type         | Null | Key | Default | Extra |
+-----------------+--------------+------+-----+---------+-------+
| member_id       | char(2)      | YES  |     | NULL    |       |
| name            | varchar(30)  | YES  |     | NULL    |       |
| email           | varchar(100) | YES  |     | NULL    |       |
| influence_count | int(11)      | YES  |     | NULL    |       |
| Joining_date    | date         | YES  |     | NULL    |       |
| multiplier      | int(11)      | YES  |     | NULL    |       |
+-----------------+--------------+------+-----+---------+-------+
```

Insert into Developers values('1','Taylor Otwell','otwell@laravel.com',739360,'2020-6-10',10);

Insert into Developers values('2','Ryan Dahl','ryan@nodejs.org',633632,'2020-04-22',10);

INSERT INTO Developers values
('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,'2020-06-3',8),
('6','Guido van Rossum','guido@python.org',968827,'2020-07-18',19),
('7','Adrian Holovaty','adrian@djangoproject.com',570724,'2020-05-07',5),
('8','Simon Willison','simon@djangoproject.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);

#Task-02

- Change the column name "influence_count". The new name should be "followers," and the data type should be integer.

ALTER TABLE Developers CHANGE influence_count followers int;

#Task-03

- Update the number of followers of each developer by +10.

Update Developers Set followers = followers + 10;

```
11 rows in set (0.000 sec)

MariaDB [lab_assignment_01]> Update Developers Set followers = followers + 10;
Query OK, 11 rows affected (0.013 sec)
Rows matched: 11  Changed: 11  Warnings: 0

MariaDB [lab_assignment_01]> 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@djangoproject.com|    570734 | 2020-05-07   |          5 |
| 8         | Simon Willison   | simon@djangoproject.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)

Query OK, 11 rows affected (0.013 sec)
```

#Task-04

- There is a formula to find the efficiency of the developers. Efficiency = ((followers*100/1000000) * (multipliers*100/20))/100. Show the efficiency of each developer in a column named "Efficiency" along with their name.

ALTER TABLE Developers ADD Efficiency int;
Update Developers Set Efficiency = ((followers*100/1000000) * (multiplier*100/20))/100;

```
MariaDB [lab_assignment_01]> Update Developers Set Efficiency = ((followers*100/1000000) * (multiplier*100/20))/100;
Query OK, 11 rows affected (0.012 sec)
Rows matched: 11  Changed: 11  Warnings: 0

MariaDB [lab_assignment_01]> Select * from Developers;
+-----------+------------------+--------------------------+-----------+--------------+------------+------------+
| member_id | name             | email                    | followers | Joining_date | multiplier | Efficiency |
+-----------+------------------+--------------------------+-----------+--------------+------------+------------+
| 1         | Taylor Otwell    | otwell@laravel.com       |    739370 | 2020-06-10   |         10 |         37 |
| 2         | Ryan Dahl        | ryan@nodejs.org          |    633642 | 2020-04-22   |         10 |         32 |
| 3         | Brendan Eich     | eich@javascript.com      |    939580 | 2020-05-07   |          8 |         38 |
| 4         | Evan You         | you@vuejs.org            |    982640 | 2020-06-11   |          7 |         34 |
| 5         | Rasmus Lerdorf   | lerdorf@php.net          |    937937 | 2020-06-03   |          8 |         38 |
| 6         | Guido van Rossum | guido@python.org         |    968837 | 2020-07-18   |         19 |         92 |
| 7         | Adrian Holovaty  | adrian@djangoproject.com |    570734 | 2020-05-07   |          5 |         14 |
| 8         | Simon Willison   | simon@djangoproject.com  |    864625 | 2020-04-30   |          4 |         17 |
| 9         | James Gosling    | james@java.com           |    719501 | 2020-05-18   |          5 |         18 |
| 10        | Rod Johnson      | rod@spring.io            |    601754 | 2020-05-18   |          7 |         21 |
| 11        | Satoshi Nakamoto | nakamoto@blockchain.com  |    630498 | 2020-05-10   |         10 |         32 |
+-----------+------------------+--------------------------+-----------+--------------+------------+------------+
11 rows in set (0.000 sec)
```

#Task-05

- Show the name of the developers in UpperCase and the descending order of their Joining_date.

Select UPPER(name) as Uppercase_name, Joining_date from Developers order by joining_date desc;

```
MariaDB [lab_assignment_01]> Select UPPER(name) as Uppercase_name, Joining_date from Developers order by joining_date desc;
+------------------+--------------+
| Uppercase_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 (0.012 sec)
```

#Task-06

- 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';