



Inspiring Excellence

CSE370

Database system

Name: Rejwan Shafi

Student ID: 23241108

Section: 08

Lab assignment: 01

Date of Submission: 05/ 10 / 2023

Answer to the question no 1

Query:

```
create table Developers
(
member_id int,
name varchar(40),
email varchar(40),
influence_count int,
Joining_date date,
multiplier int
);
```

```
MariaDB [cse370_lab_assignment_23241108]> create table Developers
-> (
-> member_id int,
-> name varchar(40),
-> email varchar(40),
-> influence_count int,
-> Joining_date date,
-> multiplier int
-> );
Query OK, 0 rows affected (0.017 sec)
```

Query: describe developers;

```
MariaDB [cse370_lab_assignment_23241108]> describe developers;
+-----+-----+-----+-----+-----+-----+
| Field          | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| member_id      | int(11)       | YES  |     | NULL    |       |
| name           | varchar(40)   | YES  |     | NULL    |       |
| email          | varchar(40)   | YES  |     | NULL    |       |
| influence_count | int(11)       | YES  |     | NULL    |       |
| Joining_date   | date          | YES  |     | NULL    |       |
| multiplier     | int(11)       | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.022 sec)
```

Query:

```
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@djangoproject.com', 570724, '2020-05-07', 5),
(9,'Simon Willison','simon@djangoproject.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 [cse370_lab_assignment_23241108]> 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),
-> (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);
Query OK, 11 rows affected (0.004 sec)
Records: 11 Duplicates: 0 Warnings: 0
```

Query:

select * from developers;

```
MariaDB [cse370_lab_assignment_23241108]> 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 (0.001 sec)
```

Answer to the question no 2

Query:

alter table developers change influence_count followers int;

```
MariaDB [cse370_lab_assignment_23241108]> alter table developers change influence_count followers int;
Query OK, 0 rows affected (0.020 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

Query:

select * from developers;

```
MariaDB [cse370_lab_assignment_23241108]> 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 (0.000 sec)
```

Answer to the question no 3

Query:

update developers set followers=followers+10;

```
MariaDB [cse370_lab_assignment_23241108]> update developers set followers=followers+10;
Query OK, 11 rows affected (0.009 sec)
Rows matched: 11  Changed: 11  Warnings: 0
```

Query:

select * from developers;

```
MariaDB [cse370_lab_assignment_23241108]> 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)
```

Answer to the question no 4

Query:

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

```
MariaDB [cse370_lab_assignment_23241108]> 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 (0.007 sec)
```

Answer to the question no 5

Query:

select name, email from developers order by followers desc limit 5;

```
MariaDB [cse370_lab_assignment_23241108]> select name, email from developers order by followers desc limit 5;
+-----+-----+
| name          | email                |
+-----+-----+
| Evan You      | you@vuejs.org        |
| Guido van Rossum | guido@python.org     |
| Brendan Eich  | eich@javascript.com  |
| Rasmus Lerdorf | lerdorf@php.net      |
| Simon Willison | simon@django project.com |
+-----+-----+
5 rows in set (0.008 sec)
```

Answer to the question no 6

Query:

select name from developers where followers < 700000 order by multiplier desc;

```
MariaDB [cse370_lab_assignment_23241108]> select name from developers where followers < 700000 order by multiplier desc;
+-----+
| name |
+-----+
| Ryan Dahl |
| Satoshi Nakamoto |
| Rod Johnson |
| Adrian Holovaty |
+-----+
4 rows in set (0.002 sec)
```

Answer to the question no 7

Query:

select avg(followers) from developers where joining_date < '2020-06-11';

```
MariaDB [cse370_lab_assignment_23241108]> select avg(followers) from developers where Joining_date < '2020-06-11';
+-----+
| avg(followers) |
+-----+
| 737515.6667 |
+-----+
1 row in set (0.007 sec)
```

Answer to the question no 8

Query:

select member_id, name, email, followers from developers where email like '%.com' or email like '%.net';

```
MariaDB [cse370_lab_assignment_23241108]> 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 |
| 6 | Rasmus Lerdorf | lerdorf@php.net | 937937 |
| 8 | Adrian Holovaty | adrian@django-project.com | 570734 |
| 9 | Simon Willison | simon@django-project.com | 864625 |
| 10 | James Gosling | james@java.com | 719501 |
| 12 | Satoshi Nakamoto | nakamoto@blockchain.com | 630498 |
+-----+-----+-----+-----+
7 rows in set (0.001 sec)
```