

CSE370

Database system

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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, θ rows affected (θ.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)
                                                  NULL
                                    YES
                                    YES
  Joining_date
                                                  NULL
                     date
 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, '2020-04-30James 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, '2020-6-10', 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, '2020-04-30James 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 (0.011 sec)
Records: 11 Duplicates: 0 Warnings: 0
```

Query:

select * from developers;

ember_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@djangoproject.com	570724	2020-05-07	5
9	Simon Willison	simon@djangoproject.com	864615	2020-04-30	4
10	2020-04-30James 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

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 (0.025 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

Query:

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	19
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@djangoproject.com	570724	2020-05-07	5
9	Simon Willison	simon@djangoproject.com	864615	2020-04-30	4
10	2020-04-30James 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

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;

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@djangoproject.com	570734	2020-05-07	5
9	Simon Willison	simon@djangoproject.com	864625	2020-04-30	4
10	2020-04-30James 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

Answer to the question no 4

Query:

select name, ((followers*100/1000000) * (multipliers*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			
2020-04-30James Gosling	17.987525000000			
Rod Johnson	21.06139000000			
Satoshi Nakamoto	31.524900000000			

Answer to the question no 5

Query:

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

Answer to the question no 6

Query:

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

Answer to the question no 7

Query:

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

Answer to the question no 8

Query:

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