



CSE 370: Database Systems

Lab No - 01

Submitted by

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Section - 11

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Date of submission - 08/10/2023

Task 1

Before Creating The Database

```
MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| phpmyadmin |
| test |
+-----+
5 rows in set (0.001 sec)
```

After Creating The Database

```
MariaDB [(none)]> CREATE Database assignment_one;
Query OK, 1 row affected (0.000 sec)

MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| assignment_one |
| information_schema |
| mysql |
| performance_schema |
| phpmyadmin |
| test |
+-----+
6 rows in set (0.001 sec)
```

After Creating Table Called Developers

```
MariaDB [(none)]> USE assignment_one;
Database changed
MariaDB [assignment_one]> CREATE TABLE Developers(
    -> member_id INT,
    -> name VARCHAR(30),
    -> email VARCHAR(40),
    -> influence_count INT,
    -> Joining_date DATE,
    -> multiplier INT);
Query OK, 0 rows affected (0.014 sec)

MariaDB [assignment_one]> SHOW TABLES;
+-----+
| Tables_in_assignment_one |
+-----+
| Developers                |
+-----+
1 row in set (0.001 sec)
```

Adding Values to Database Table

```
MariaDB [assignment_one]> 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@djangooproject.com',570724,'2020-05-07',5),
    -> (9,'Simon Willison','simon@djangooproject.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 (0.012 sec)
Records: 11  Duplicates: 0  Warnings: 0

MariaDB [assignment_one]> 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@djangooproject.com | 570724         | 2020-05-07  | 5          |
| 9         | Simon Willison | simon@djangooproject.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)
```

Task 2

```
MariaDB [assignment_one]> ALTER TABLE Developers CHANGE COLUMN influence_count followers INT;  
Query OK, 0 rows affected (0.010 sec)  
Records: 0 Duplicates: 0 Warnings: 0
```

```
MariaDB [assignment_one]> 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)

Task 3

```
MariaDB [assignment_one]> UPDATE Developers SET followers = followers+10;  
Query OK, 11 rows affected (0.007 sec)  
Rows matched: 11 Changed: 11 Warnings: 0
```

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

Task 4

```
MariaDB [assignment_one]> 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)
```

Task 5

```
MariaDB [assignment_one]> 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@djangoproject.com

```
5 rows in set (0.008 sec)
```

Task 6

```
MariaDB [assignment_one]> SELECT name
-> FROM Developers
-> WHERE followers < 700000
-> AND multiplier = (SELECT MAX(multiplier) FROM Developers WHE
RE followers < 700000);
+-----+
| name          |
+-----+
| Ryan Dahl     |
| Satoshi Nakamoto |
+-----+
2 rows in set (0.001 sec)
```

Task 7

```
MariaDB [assignment_one]> SELECT AVG(followers) AS average_follower
s
-> FROM Developers
-> WHERE joining_date < '2020-06-11';
+-----+
| average_followers |
+-----+
| 737515.6667 |
+-----+
1 row in set (0.001 sec)
```

Task 8

```
MariaDB [assignment_one]> 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)
```