

CSE370 : Database Systems

Assignment 01 | Fall 2024

ID : 22301719 | Name : UMMAY MAIMONA CHAMAN

No 1 Query (as Plain Text)

mysql -u root -p
Enter password:

CREATE DATABASE Google22301719;

USE Google22301719;

CREATE TABLE Developers (

- > member_id INT,
- > name CHAR(255),
- > email CHAR(255),
- > influence_count DOUBLE,
- > Joining_date DATE,
- > multiplier DECIMAL(10, 2)
- >);

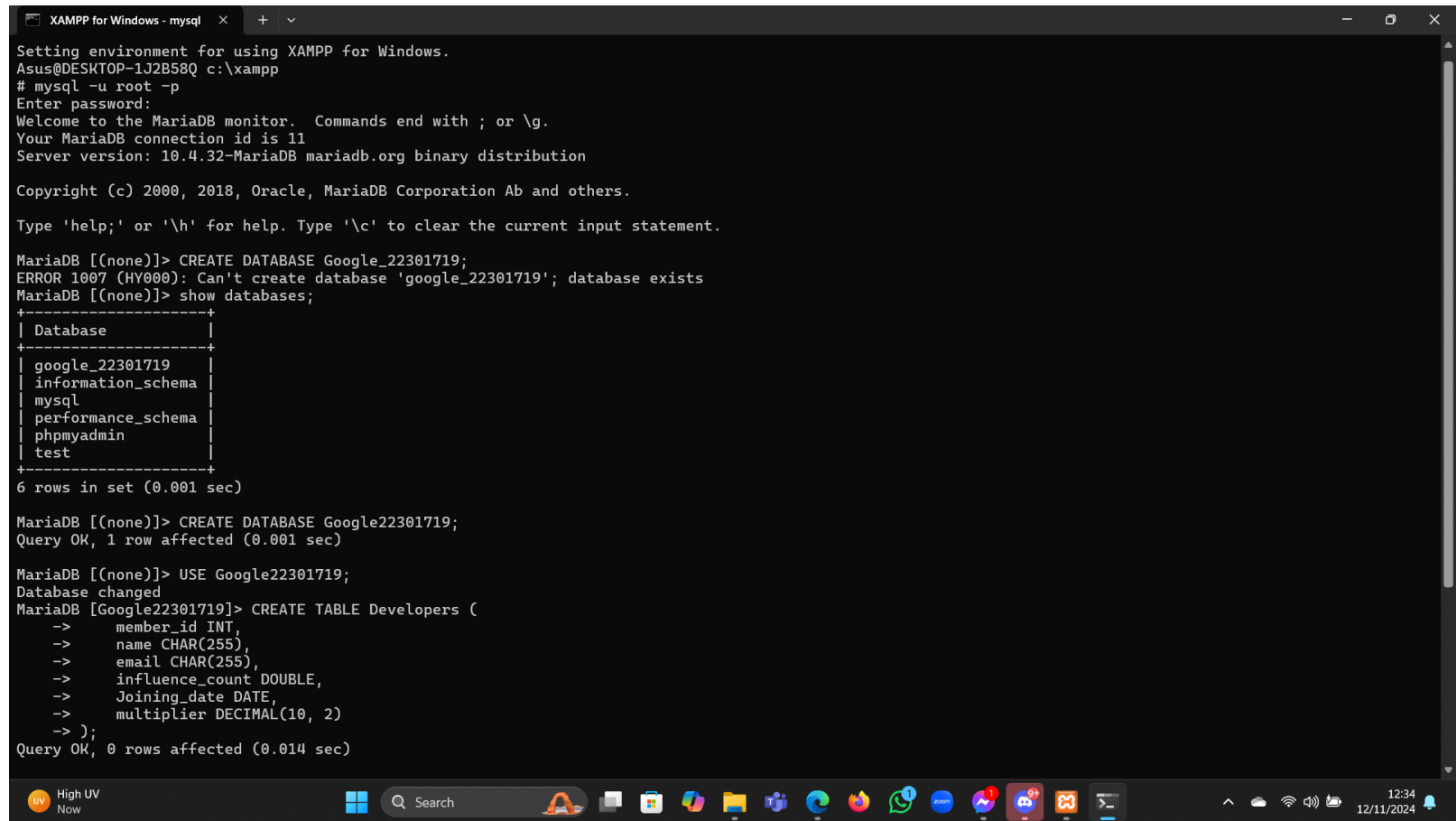
INSERT INTO Developers VALUES

- > (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@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);

select*from Developers;

No 1 SS (of Query & Output in Shell)



```
XAMPP for Windows - mysql
Setting environment for using XAMPP for Windows.
Asus@DESKTOP-1J2B58Q c:\xampp
# mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 11
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)]> CREATE DATABASE Google_22301719;
ERROR 1007 (HY000): Can't create database 'google_22301719'; database exists
MariaDB [(none)]> show databases;
+-----+
| Database |
+-----+
| google_22301719 |
| information_schema |
| mysql |
| performance_schema |
| phpmyadmin |
| test |
+-----+
6 rows in set (0.001 sec)

MariaDB [(none)]> CREATE DATABASE Google22301719;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> USE Google22301719;
Database changed
MariaDB [Google22301719]> CREATE TABLE Developers (
->     member_id INT,
->     name CHAR(255),
->     email CHAR(255),
->     influence_count DOUBLE,
->     Joining_date DATE,
->     multiplier DECIMAL(10, 2)
-> );
Query OK, 0 rows affected (0.014 sec)
```

```
XAMPP for Windows - mysql x + v
-> multiplier DECIMAL(10, 2)
-> );
Query OK, 0 rows affected (0.014 sec)

MariaDB [Google22301719]> show tables;
+-----+
| Tables_in_google22301719 |
+-----+
| developers                |
+-----+
1 row in set (0.001 sec)

MariaDB [Google22301719]> describe Developers;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| member_id  | int(11)   | YES  |     | NULL    |       |
| name       | char(255) | YES  |     | NULL    |       |
| email      | char(255) | YES  |     | NULL    |       |
| influence_count | double   | YES  |     | NULL    |       |
| Joining_date | date     | YES  |     | NULL    |       |
| multiplier | decimal(10,2) | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.031 sec)

MariaDB [Google22301719]> 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@djangooproject.com', 570724, '2020-05-07', 5),
-> (8, 'Simon Willison', 'simon@djangooproject.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 (0.038 sec)
Records: 11 Duplicates: 0 Warnings: 0

MariaDB [Google22301719]> |
```

87°F
Haze

Search

12:41
12/11/2024

```
XAMPP for Windows - mysql
| email | char(255) | YES | | NULL | | |
| influence_count | double | YES | | NULL | | |
| Joining_date | date | YES | | NULL | | |
| multiplier | decimal(10,2) | YES | | NULL | | |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.031 sec)

MariaDB [Google22301719]> 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 (0.038 sec)
Records: 11 Duplicates: 0 Warnings: 0

MariaDB [Google22301719]> select*from Developers;
+-----+-----+-----+-----+-----+-----+
| member_id | name | email | influence_count | Joining_date | multiplier |
+-----+-----+-----+-----+-----+-----+
| 1 | Taylor Otwell | otwell@laravel.com | 739360 | 2020-06-10 | 10.00 |
| 2 | Ryan Dahl | ryan@nodejs.org | 633632 | 2020-04-22 | 10.00 |
| 3 | Brendan Eich | eich@javascript.com | 939570 | 2020-05-07 | 8.00 |
| 4 | Evan You | you@vuejs.org | 982630 | 2020-06-11 | 7.00 |
| 5 | Rasmus Lerdorf | lerdorf@php.net | 937927 | 2020-06-03 | 8.00 |
| 6 | Guido van Rossum | guido@python.org | 968827 | 2020-07-18 | 19.00 |
| 7 | Adrian Holovaty | adrian@django project.com | 570724 | 2020-05-07 | 5.00 |
| 8 | Simon Willison | simon@django project.com | 864615 | 2020-04-30 | 4.00 |
| 9 | James Gosling | james@java.com | 719491 | 2020-05-18 | 5.00 |
| 10 | Rod Johnson | rod@spring.io | 601744 | 2020-05-18 | 7.00 |
| 11 | Satoshi Nakamoto | nakamoto@blockchain.com | 630488 | 2020-05-10 | 10.00 |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.001 sec)

MariaDB [Google22301719]>
```

No 2 Query
(as Plain Text)

ALTER TABLE Developers CHANGE influence_count followers INT;

No 2 SS
(of Query & Output
in Shell)

```
XAMPP for Windows - mysql x + v
MariaDB [Google22301719]> select*from Developers;
+-----+-----+-----+-----+-----+-----+
| member_id | name      | email              | influence_count | Joining_date | multiplier |
+-----+-----+-----+-----+-----+-----+
| 1 | Taylor Otwell | otwell@laravel.com | 739360 | 2020-06-10 | 10.00 |
| 2 | Ryan Dahl    | ryan@nodejs.org   | 633632 | 2020-04-22 | 10.00 |
| 3 | Brendan Eich | eich@javascript.com | 939570 | 2020-05-07 | 8.00 |
| 4 | Evan You    | you@vuejs.org     | 982630 | 2020-06-11 | 7.00 |
| 5 | Rasmus Lerdorf | lerdorf@php.net | 937927 | 2020-06-03 | 8.00 |
| 6 | Guido van Rossum | guido@python.org | 968827 | 2020-07-18 | 19.00 |
| 7 | Adrian Holovaty | adrian@django project.com | 570724 | 2020-05-07 | 5.00 |
| 8 | Simon Willison | simon@django project.com | 864615 | 2020-04-30 | 4.00 |
| 9 | James Gosling | james@java.com    | 719491 | 2020-05-18 | 5.00 |
| 10 | Rod Johnson  | rod@spring.io     | 601744 | 2020-05-18 | 7.00 |
| 11 | Satoshi Nakamoto | nakamoto@blockchain.com | 630488 | 2020-05-10 | 10.00 |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.001 sec)

MariaDB [Google22301719]> ALTER TABLE Developers CHANGE influence_count followers INT;
Query OK, 11 rows affected (0.046 sec)
Records: 11 Duplicates: 0 Warnings: 0

MariaDB [Google22301719]> select*from Developers;
+-----+-----+-----+-----+-----+-----+
| member_id | name      | email              | followers | Joining_date | multiplier |
+-----+-----+-----+-----+-----+-----+
| 1 | Taylor Otwell | otwell@laravel.com | 739360 | 2020-06-10 | 10.00 |
| 2 | Ryan Dahl    | ryan@nodejs.org   | 633632 | 2020-04-22 | 10.00 |
| 3 | Brendan Eich | eich@javascript.com | 939570 | 2020-05-07 | 8.00 |
| 4 | Evan You    | you@vuejs.org     | 982630 | 2020-06-11 | 7.00 |
| 5 | Rasmus Lerdorf | lerdorf@php.net | 937927 | 2020-06-03 | 8.00 |
| 6 | Guido van Rossum | guido@python.org | 968827 | 2020-07-18 | 19.00 |
| 7 | Adrian Holovaty | adrian@django project.com | 570724 | 2020-05-07 | 5.00 |
| 8 | Simon Willison | simon@django project.com | 864615 | 2020-04-30 | 4.00 |
| 9 | James Gosling | james@java.com    | 719491 | 2020-05-18 | 5.00 |
| 10 | Rod Johnson  | rod@spring.io     | 601744 | 2020-05-18 | 7.00 |
| 11 | Satoshi Nakamoto | nakamoto@blockchain.com | 630488 | 2020-05-10 | 10.00 |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.002 sec)

MariaDB [Google22301719]>
```

No 3 Query
(as Plain Text)

UPDATE Developers SET followers = followers + 10;

No 3 SS (of Query & Output in Shell)

```
XAMPP for Windows - mysql
MariaDB [Google22301719]> select*from Developers;
+-----+-----+-----+-----+-----+-----+
| member_id | name          | email              | followers | Joining_date | multiplier |
+-----+-----+-----+-----+-----+-----+
| 1         | Taylor Otwell | otwell@laravel.com | 739360    | 2020-06-10   | 10.00      |
| 2         | Ryan Dahl     | ryan@nodejs.org    | 633632    | 2020-04-22   | 10.00      |
| 3         | Brendan Eich  | eich@javascript.com | 939570    | 2020-05-07   | 8.00       |
| 4         | Evan You      | you@vuejs.org       | 982630    | 2020-06-11   | 7.00       |
| 5         | Rasmus Lerdorf | lerdorf@php.net     | 937927    | 2020-06-03   | 8.00       |
| 6         | Guido van Rossum | guidorpython.org    | 968827    | 2020-07-18   | 19.00      |
| 7         | Adrian Holovaty | adrian@django project.com | 570724    | 2020-05-07   | 5.00       |
| 8         | Simon Willison | simon@django project.com | 864615    | 2020-04-30   | 4.00       |
| 9         | James Gosling  | james@java.com      | 719491    | 2020-05-18   | 5.00       |
| 10        | Rod Johnson    | rod@spring.io       | 601744    | 2020-05-18   | 7.00       |
| 11        | Satoshi Nakamoto | nakamoto@blockchain.com | 630488    | 2020-05-10   | 10.00      |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.002 sec)

MariaDB [Google22301719]> UPDATE Developers SET followers = followers + 10;
Query OK, 11 rows affected (0.004 sec)
Rows matched: 11 Changed: 11 Warnings: 0

MariaDB [Google22301719]> select*from Developers;
+-----+-----+-----+-----+-----+-----+
| member_id | name          | email              | followers | Joining_date | multiplier |
+-----+-----+-----+-----+-----+-----+
| 1         | Taylor Otwell | otwell@laravel.com | 739370    | 2020-06-10   | 10.00      |
| 2         | Ryan Dahl     | ryan@nodejs.org    | 633642    | 2020-04-22   | 10.00      |
| 3         | Brendan Eich  | eich@javascript.com | 939580    | 2020-05-07   | 8.00       |
| 4         | Evan You      | you@vuejs.org       | 982640    | 2020-06-11   | 7.00       |
| 5         | Rasmus Lerdorf | lerdorf@php.net     | 937937    | 2020-06-03   | 8.00       |
| 6         | Guido van Rossum | guidorpython.org    | 968837    | 2020-07-18   | 19.00      |
| 7         | Adrian Holovaty | adrian@django project.com | 570734    | 2020-05-07   | 5.00       |
| 8         | Simon Willison | simon@django project.com | 864625    | 2020-04-30   | 4.00       |
| 9         | James Gosling  | james@java.com      | 719501    | 2020-05-18   | 5.00       |
| 10        | Rod Johnson    | rod@spring.io       | 601754    | 2020-05-18   | 7.00       |
| 11        | Satoshi Nakamoto | nakamoto@blockchain.com | 630498    | 2020-05-10   | 10.00      |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.000 sec)

MariaDB [Google22301719]>
```

No 4 Query (as Plain Text)

```
ALTER TABLE Developers ADD Efficiency DECIMAL(10, 2);

UPDATE Developers
-> SET Efficiency = ROUND(((followers * 100 / 1000000) * (multiplier * 100 / 20)) / 100, 2);
```

No 4 SS
(of Query & Output
in Shell)

```
XAMPP for Windows - mysql
+-----+
| 2 | Ryan Dahl | ryan@nodejs.org | 633642 | 2020-04-22 | 10.00 |
| 3 | Brendan Eich | eich@javascript.com | 939580 | 2020-05-07 | 8.00 |
| 4 | Evan You | you@vuejs.org | 982640 | 2020-06-11 | 7.00 |
| 5 | Rasmus Lerdorf | lerdorf@php.net | 937937 | 2020-06-03 | 8.00 |
| 6 | Guido van Rossum | guido@python.org | 968837 | 2020-07-18 | 19.00 |
| 7 | Adrian Holovaty | adrian@django project.com | 570734 | 2020-05-07 | 5.00 |
| 8 | Simon Willison | simon@django project.com | 864625 | 2020-04-30 | 4.00 |
| 9 | James Gosling | james@java.com | 719501 | 2020-05-18 | 5.00 |
| 10 | Rod Johnson | rod@spring.io | 601754 | 2020-05-18 | 7.00 |
| 11 | Satoshi Nakamoto | nakamoto@blockchain.com | 630498 | 2020-05-10 | 10.00 |
+-----+
11 rows in set (0.000 sec)

MariaDB [Google22301719]> ALTER TABLE Developers ADD Efficiency DECIMAL(10, 2);
Query OK, 0 rows affected (0.010 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [Google22301719]> UPDATE Developers
-> SET Efficiency = ROUND(((followers * 100 / 1000000) * (multiplier * 100 / 20)) / 100, 2);
Query OK, 11 rows affected (0.003 sec)
Rows matched: 11 Changed: 11 Warnings: 0

MariaDB [Google22301719]> select*from Developers;
+-----+
| member_id | name | email | followers | Joining_date | multiplier | Efficiency |
+-----+
| 1 | Taylor Otwell | otwell@laravel.com | 739370 | 2020-06-10 | 10.00 | 36.97 |
| 2 | Ryan Dahl | ryan@nodejs.org | 633642 | 2020-04-22 | 10.00 | 31.68 |
| 3 | Brendan Eich | eich@javascript.com | 939580 | 2020-05-07 | 8.00 | 37.58 |
| 4 | Evan You | you@vuejs.org | 982640 | 2020-06-11 | 7.00 | 34.39 |
| 5 | Rasmus Lerdorf | lerdorf@php.net | 937937 | 2020-06-03 | 8.00 | 37.52 |
| 6 | Guido van Rossum | guido@python.org | 968837 | 2020-07-18 | 19.00 | 92.04 |
| 7 | Adrian Holovaty | adrian@django project.com | 570734 | 2020-05-07 | 5.00 | 14.27 |
| 8 | Simon Willison | simon@django project.com | 864625 | 2020-04-30 | 4.00 | 17.29 |
| 9 | James Gosling | james@java.com | 719501 | 2020-05-18 | 5.00 | 17.99 |
| 10 | Rod Johnson | rod@spring.io | 601754 | 2020-05-18 | 7.00 | 21.06 |
| 11 | Satoshi Nakamoto | nakamoto@blockchain.com | 630498 | 2020-05-10 | 10.00 | 31.52 |
+-----+
11 rows in set (0.001 sec)

MariaDB [Google22301719]> |
```

No 5 Query
(as Plain Text)

SELECT UPPER(name) FROM Developers;

SELECT*FROM Developers Order by name DESC;

No 5 SS
(of Query & Output
in Shell)

XAMPP for Windows - mysql

11	Satoshi Nakamoto	nakamoto@blockchain.com	630498	2020-05-10	10.00	31.52
----	------------------	-------------------------	--------	------------	-------	-------

11 rows in set (0.001 sec)

MariaDB [Google22301719]> SELECT UPPER(name) FROM Developers;

UPPER(name)
TAYLOR OTWELL
RYAN DAHL
BRENDAN EICH
EVAN YOU
RASMUS LERDORF
GUIDO VAN ROSSUM
ADRIAN HOLOVATY
SIMON WILLISON
JAMES GOSLING
ROD JOHNSON
SATOSHI NAKAMOTO

11 rows in set (0.000 sec)

MariaDB [Google22301719]> SELECT*FROM Developers Order by name DESC;

member_id	name	email	followers	Joining_date	multiplier	Efficiency
1	Taylor Otwell	otwell@laravel.com	739370	2020-06-10	10.00	36.97
8	Simon Willison	simon@django-project.com	864625	2020-04-30	4.00	17.29
11	Satoshi Nakamoto	nakamoto@blockchain.com	630498	2020-05-10	10.00	31.52
2	Ryan Dahl	ryan@nodejs.org	633642	2020-04-22	10.00	31.68
10	Rod Johnson	rod@spring.io	601754	2020-05-18	7.00	21.06
5	Rasmus Lerdorf	lerdorf@php.net	937937	2020-06-03	8.00	37.52
9	James Gosling	james@java.com	719501	2020-05-18	5.00	17.99
6	Guido van Rossum	guido@python.org	968837	2020-07-18	19.00	92.04
4	Evan You	you@vuejs.org	982640	2020-06-11	7.00	34.39
3	Brendan Eich	eich@javascript.com	939580	2020-05-07	8.00	37.58
7	Adrian Holovaty	adrian@django-project.com	570734	2020-05-07	5.00	14.27

11 rows in set (0.001 sec)

MariaDB [Google22301719]>

88°F
Haze

Search

13:30
12/11/2024

No 6 Query
(as Plain Text)

SELECT member_id, name, email, followers FROM Developers
WHERE email LIKE '%.com' OR email LIKE '%.net';

No 6 SS
(of Query & Output
in Shell)

XAMPP for Windows - mysql

SIMON WILLISON
JAMES GOSLING
ROD JOHNSON
SATOSHI NAKAMOTO

11 rows in set (0.000 sec)

MariaDB [Google22301719]> SELECT*FROM Developers Order by name DESC;

member_id	name	email	followers	Joining_date	multiplier	Efficiency
1	Taylor Otwell	otwell@laravel.com	739370	2020-06-10	10.00	36.97
8	Simon Willison	simon@djangooproject.com	864625	2020-04-30	4.00	17.29
11	Satoshi Nakamoto	nakamoto@blockchain.com	630498	2020-05-10	10.00	31.52
2	Ryan Dahl	ryan@nodejs.org	633642	2020-04-22	10.00	31.68
10	Rod Johnson	rod@spring.io	601754	2020-05-18	7.00	21.06
5	Rasmus Lerdorf	lerdorf@php.net	937937	2020-06-03	8.00	37.52
9	James Gosling	james@java.com	719501	2020-05-18	5.00	17.99
6	Guido van Rossum	guido@python.org	968837	2020-07-18	19.00	92.04
4	Evan You	you@vuejs.org	982640	2020-06-11	7.00	34.39
3	Brendan Eich	eich@javascript.com	939580	2020-05-07	8.00	37.58
7	Adrian Holovaty	adrian@djangooproject.com	570734	2020-05-07	5.00	14.27

11 rows in set (0.001 sec)

MariaDB [Google22301719]> 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@djangooproject.com	570734
8	Simon Willison	simon@djangooproject.com	864625
9	James Gosling	james@java.com	719501
11	Satoshi Nakamoto	nakamoto@blockchain.com	630498

7 rows in set (0.000 sec)

MariaDB [Google22301719]>

88°F
Haze

Search

13:33
12/11/2024