CSE370 : Database Systems

Assignment 01/02/03 | Fall 2024

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No 1 Query (as Plain Text)	CREATE DATABASE Google_22201910;
	USE Google_22201910;
	CREATE TABLE Developers(
	   -> member_id INT PRIMARY KEY,
	   -> name VARCHAR(50),
	   -> email VARCHAR(100),
	   -> influence_count INT,
	   -> joining_date DATE,
	   -> multiplier INT);
	INSERT INTO Developers (member_id, name, email, influence_count, joining_date, multiplier) 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);

No 1 SS (of Query & Output in Shell)	
| | ```
MariaDB [(none)]> SHOW DATABASES;
+--------------------+
| Database           |
+--------------------+
| information_schema |
| mysql              |
| performance_schema |
| phpmyadmin         |
| test               |
+--------------------+
5 rows in set (0.015 sec)

MariaDB [(none)]> CREATE DATABASE Google_22201910;
Query OK, 1 row affected (0.003 sec)

MariaDB [(none)]> USE Google_22201910;
Database changed
MariaDB [Google_22201910]> CREATE TABLE Developers (
    -> member_id INT PRIMARY KEY,
    -> name VARCHAR(50),
    -> email VARCHAR(100),
    -> influence_count INT,
    -> joining_date DATE,
    -> multiplier INT);
Query OK, 0 rows affected (0.012 sec)
``` |

```
MariaDB [Google_22201910]> INSERT INTO Developers (member_id, name, email, influence_count, joining_date, multiplier) 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);
Query OK, 11 rows affected (0.051 sec)
Records: 11  Duplicates: 0  Warnings: 0

MariaDB [Google_22201910]> 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 |
|         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 |
+-----------+------------------+--------------------------+-----------------+--------------+------------+
11 rows in set (0.000 sec)
```

No 2 Query (as Plain Text)	ALTER TABLE Developers CHANGE influence_count followers INT;

| No 2 SS (of Query & Output in Shell) | ```
MariaDB [Google_22201910]> ALTER TABLE Developers CHANGE influence_count followers INT;
Query OK, 0 rows affected (0.006 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [Google_22201910]> SELECT
    -> 8');
    '> ');
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server v
')' at line 2
MariaDB [Google_22201910]> SELECT
    -> 8
    -> ');
    '> ');
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server v
')' at line 3
MariaDB [Google_22201910]> 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 |
|         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 |
+-----------+------------------+----------------------------+-----------+--------------+------------+
11 rows in set (0.000 sec)
``` |
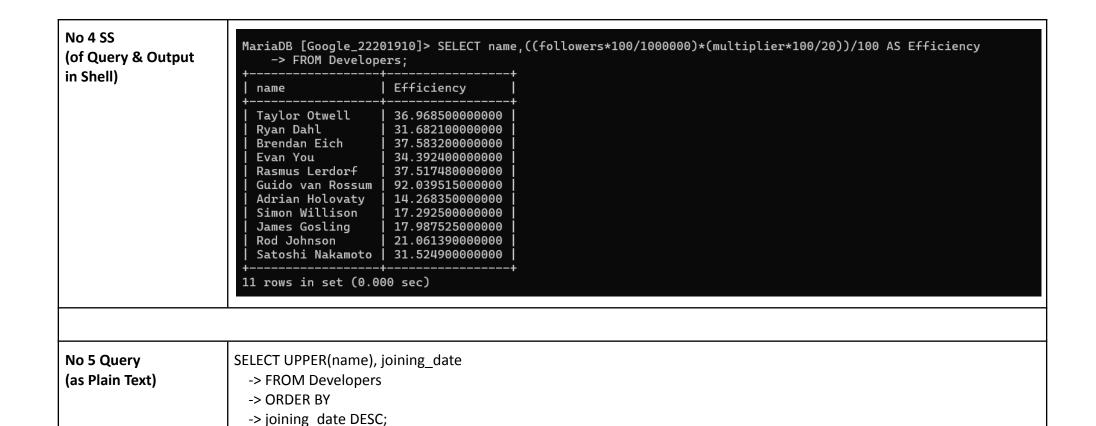| | |
| No 3 Query (as Plain Text) | UPDATE Developers
  -> SET followers = followers + 10; |

No 3 SS (of Query & Output in Shell)	
| | ```
MariaDB [Google_22201910]> UPDATE Developers
    -> SET followers = followers + 10;
Query OK, 11 rows affected (0.003 sec)
Rows matched: 11  Changed: 11  Warnings: 0

MariaDB [Google_22201910]> 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)
``` |
| | |
| No 4 Query (as Plain Text) | SELECT name,((followers*100/1000000)*(multiplier*100/20))/100 AS Efficiency
   -> FROM Developers; |

No 4 SS **(of Query & Output** **in Shell)**	``` MariaDB [Google_22201910]> 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 (0.000 sec) ```

No 5 Query
(as Plain Text)
	SELECT UPPER(name), joining_date
	    -> FROM Developers
	    -> ORDER BY
	    -> joining_date DESC;

| **No 5 SS**<br>**(of Query & Output**<br>**in Shell)** | ```
MariaDB [Google_22201910]> SELECT UPPER(name), joining_date
    -> FROM Developers
    -> ORDER BY
    -> joining_date DESC;
+-------------------+--------------+
| UPPER(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 (0.000 sec)
``` |
| | |
| **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)**	```MariaDB [Google_22201910]> 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@djangoproject.com	570734
8	Simon Willison	simon@djangoproject.com	864625
9	James Gosling	james@java.com	719501
11	Satoshi Nakamoto	nakamoto@blockchain.com	630498
+-----------+-----------------+---------------------------+-----------+
7 rows in set (0.000 sec)``` |
No 7 Query **(as Plain Text)**	
No 7 SS **(of Query & Output** **in Shell)**	