

## CSE370 : Database Systems

### Assignment 01 | Fall 2024

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No 1 Query (as Plain Text)	CREATE DATABASE Google_20301484; USE Google_20301484;
No 1 SS (of Query & Output in Shell)	<pre>MariaDB [(none)]&gt; CREATE DATABASE Google_20301484; Query OK, 1 row affected (0.001 sec)  MariaDB [(none)]&gt; USE Google_20301484; Database changed</pre>
No 2 Query (as Plain Text)	<pre>CREATE TABLE Developers -&gt; ( -&gt; member_id char(2), -&gt; name varchar(30), -&gt; email varchar(30), -&gt; influence_count int, -&gt; Joining_date date, -&gt; multiplier int -&gt; );  INSERT INTO Developers values -&gt; ('1', 'Taylor Otwell', 'otwell@laravel.com', 739360, '2020-6-10', 10), -&gt; ('2', 'Ryan Dahl', 'ryan@nodejs.org', 633632, '2020-04-22', 10), -&gt; ('3', 'Brendan Eich', 'eich@javascript.com', 939570, '2020-05-07', 8), -&gt; ('4', 'Evan You', 'you@vuejs.org', 982630, '2020-06-11', 7), -&gt; ('5', 'Rasmus Lerdorf', 'lerdorf@php.net', 937927, '2020-06-3', 8), -&gt; ('6', 'Guido van Rossum', 'guido@python.org', 968827, '2020-07-18', 19), -&gt; ('7', 'Adrian Holovaty', 'adrian@djangoproject.com', 570724, '2020-05-07', 5),</pre>

	<pre>-&gt; ('8', 'Simon Willison', 'simon@django-project.com', 864615, '2020-04-30', 4), -&gt; ('9', 'James Gosling', 'james@java.com', 719491, '2020-05-18', 5), -&gt; ('10', 'Rod Johnson', 'rod@spring.io', 601744, '2020-05-18', 7), -&gt; ('11', 'Satoshi Nakamoto', 'nakamoto@blockchain.com', 630488, '2020-05-10', 10);</pre>
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No 2 SS  
(of Query & Output  
in Shell)

```
MariaDB [Google_20301484]> CREATE TABLE Developers
```

```
-> (  
-> member_id char(2),  
-> name varchar(30),  
-> email varchar(30),  
-> influence_count int,  
-> Joining_date date,  
-> multiplier int  
-> );
```

```
Query OK, 0 rows affected (0.175 sec)
```

```
MariaDB [Google_20301484]> 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),  
-> ('4', 'Evan You', 'you@vuejs.org', 982630, '2020-06-11', 7),  
-> ('5', 'Rasmus Lerdorf', 'lerdorf@php.net', 937927, '2020-06-3', 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 (0.403 sec)
```

```
Records: 11 Duplicates: 0 Warnings: 0
```

```
MariaDB [Google_20301484]> 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@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

<b>No 3 Query</b> <b>(as Plain Text)</b>	ALTER TABLE Developers CHANGE COLUMN influence_count followers int;
<b>No 3 SS</b> <b>(of Query &amp; Output</b> <b>in Shell)</b>	<pre> MariaDB [Google_20301484]&gt; ALTER TABLE Developers CHANGE COLUMN influence_count followers int; Query OK, 0 rows affected (0.371 sec) Records: 0  Duplicates: 0  Warnings: 0  MariaDB [Google_20301484]&gt; 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@django.org     570724      2020-05-07     5              8            Simon Willison   simon@django.org      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) </pre>
<b>No 4 Query</b> <b>(as Plain Text)</b>	UPDATE Developers SET followers = followers + 10;

No 4 SS  
(of Query & Output  
in Shell)

```
MariaDB [Google_20301484]> UPDATE Developers SET followers = followers + 10;  
Query OK, 11 rows affected (0.344 sec)  
Rows matched: 11  Changed: 11  Warnings: 0
```

```
MariaDB [Google_20301484]> 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 5 Query  
(as Plain Text)

```
SELECT name, (((followers * 100 / 1000000) * (multiplier * 100 / 20)) / 100) AS Efficiency FROM Developers;
```



No 5 SS  
(of Query & Output  
in Shell)

```
MariaDB [Google_20301484]> 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)
```

No 6 Query  
(as Plain Text)

SELECT UPPER(name), Joining\_date FROM Developers ORDER BY Joining\_date DESC;

No 6 SS  
(of Query & Output  
in Shell)

```
MariaDB [Google_20301484]> 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 (0.001 sec)
```

<b>No 7 Query</b> <b>(as Plain Text)</b>	SELECT member_id, name, email, followers FROM Developers WHERE email LIKE '%.com' OR email LIKE '%.net';
<b>No 7 SS</b> <b>(of Query &amp; Output</b> <b>in Shell)</b>	<pre> MariaDB [Google_20301484]&gt; 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@django project.com   570734        8           Simon Willison   simon@django project.com   864625        9           James Gosling    james@java.com         719501        11          Satoshi Nakamoto   nakamoto@blockchain.com   630498      +-----+-----+-----+-----+ 7 rows in set (0.001 sec) </pre>