

## CSE370 : Database Systems

Assignment 01/02/03 | Fall 2024

ID : <8 Digit Student ID> | Name : Full Official Name

### No 1 Query (as Plain Text)

```
CREATE DATABASE Google_22299480;
USE Google_22299480;
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@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);
```

No 1 SS  
(of Query & Output  
in Shell)

```
MariaDB [google_22299480]> 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 (0.011 sec)
```

```
MariaDB [google_22299480]> DESCRIBE Developers;  
+-----+-----+-----+-----+-----+-----+  
| Field          | Type          | Null | Key | Default | Extra |  
+-----+-----+-----+-----+-----+-----+  
| member_id      | int(11)       | NO   | PRI | NULL    |       |  
| name           | varchar(50)   | YES  |     | NULL    |       |  
| email          | varchar(100)  | YES  |     | NULL    |       |  
| influence_count | int(11)       | YES  |     | NULL    |       |  
| joining_date   | date          | YES  |     | NULL    |       |  
| multiplier     | int(11)       | YES  |     | NULL    |       |  
+-----+-----+-----+-----+-----+-----+  
6 rows in set (0.016 sec)
```

	<pre> MariaDB [google_22299480]&gt; 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   +-----+-----+-----+-----+-----+-----+ 11 rows in set (0.000 sec) </pre>
<b>No 2 Query</b> <b>(as Plain Text)</b>	<pre> ALTER TABLE Developers CHANGE COLUMN influence_count followers INT; SELECT * FROM Developers; </pre>
<b>No 2 SS</b> <b>(of Query &amp; Output in Shell)</b>	<pre> MariaDB [google_22299480]&gt; ALTER TABLE Developers CHANGE COLUMN influence_count followers INT; Query OK, 0 rows affected (0.005 sec) Records: 0  Duplicates: 0  Warnings: 0 </pre>

	<pre>MariaDB [google_22299480]&gt; SELECT * FROM Developers;</pre> <table><tr><th>member_id</th><th>name</th><th>email</th><th>followers</th><th>joining_date</th><th>multiplier</th></tr><tr><td>1</td><td>Taylor Otwell</td><td>otwell@laravel.com</td><td>739360</td><td>2020-06-10</td><td>10</td></tr><tr><td>2</td><td>Ryan Dahl</td><td>ryan@nodejs.org</td><td>633632</td><td>2020-04-22</td><td>10</td></tr><tr><td>3</td><td>Brendan Eich</td><td>eich@javascript.com</td><td>939570</td><td>2020-05-07</td><td>8</td></tr><tr><td>4</td><td>Evan You</td><td>you@vuejs.org</td><td>982630</td><td>2020-06-11</td><td>7</td></tr><tr><td>5</td><td>Rasmus Lerdorf</td><td>lerdorf@php.net</td><td>937927</td><td>2020-06-03</td><td>8</td></tr><tr><td>6</td><td>Guido van Rossum</td><td>guido@python.org</td><td>968827</td><td>2020-07-18</td><td>19</td></tr><tr><td>7</td><td>Adrian Holovaty</td><td>adrian@djangoproject.com</td><td>570724</td><td>2020-05-07</td><td>5</td></tr><tr><td>8</td><td>Simon Willison</td><td>simon@djangoproject.com</td><td>864615</td><td>2020-04-30</td><td>4</td></tr><tr><td>9</td><td>James Gosling</td><td>james@java.com</td><td>719491</td><td>2020-05-18</td><td>5</td></tr><tr><td>10</td><td>Rod Johnson</td><td>rod@spring.io</td><td>601744</td><td>2020-05-18</td><td>7</td></tr><tr><td>11</td><td>Satoshi Nakamoto</td><td>nakamoto@blockchain.com</td><td>630488</td><td>2020-05-10</td><td>10</td></tr></table> <pre>11 rows in set (0.000 sec)</pre>	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
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No 3 Query (as Plain Text)	UPDATE Developers SET followers = followers + 10;																																																																								

No 3 SS  
(of Query & Output  
in Shell)

```
MariaDB [google_22299480]> UPDATE Developers SET followers = followers + 10;  
Query OK, 11 rows affected (0.010 sec)  
Rows matched: 11  Changed: 11  Warnings: 0
```

```
MariaDB [google_22299480]> 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@django project.com	570734	2020-05-07	5
8	Simon Willison	simon@django project.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_22299480]> 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  
AS name_uppercase  
FROM Developers  
ORDER BY joining_date DESC;
```

No 5 SS  
(of Query & Output  
in Shell)

```
MariaDB [google_22299480]> SELECT UPPER(name), joining_date
-> AS name_uppercase
-> FROM Developers
-> ORDER BY joining_date DESC;

+-----+-----+
| UPPER(name) | name_uppercase |
+-----+-----+
| 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_22299480]> 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 (0.000 sec)