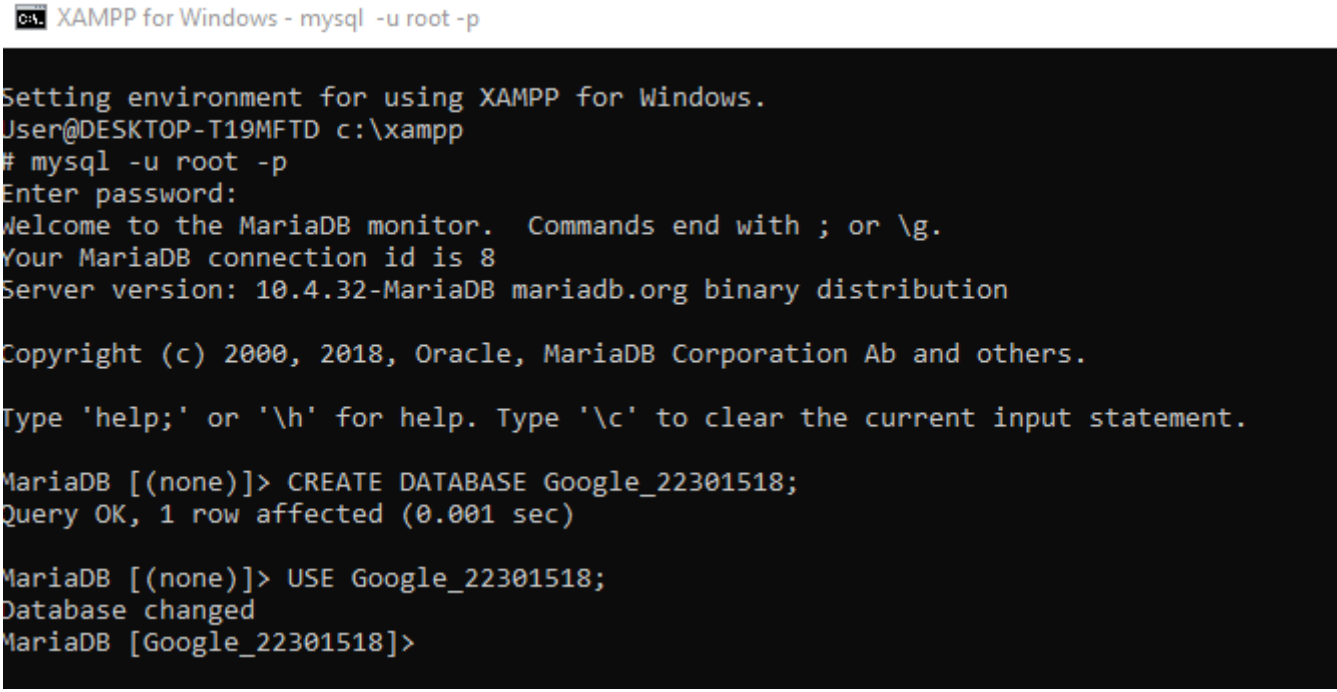


CSE370 : Database Systems

Assignment 01/02/03 | Spring 2025

ID : 22301518 | Name : Adittya Kumar Chowdhury

No 1 Query (as Plain Text)	<ol style="list-style-type: none">1) CREATE DATABASE Google_22301518;2) USE Google_22301518
No 1 SS (of Query & Output in Shell)	 <p>The screenshot shows a terminal window with the following content:</p> <pre>C:\> XAMPP for Windows - mysql -u root -p Setting environment for using XAMPP for Windows. User@DESKTOP-T19MFTD c:\xampp # mysql -u root -p Enter password: Welcome to the MariaDB monitor. Commands end with ; or \g. Your MariaDB connection id is 8 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_22301518; Query OK, 1 row affected (0.001 sec) MariaDB [(none)]> USE Google_22301518; Database changed MariaDB [Google_22301518]></pre>
No 2 Query (as Plain Text)	<ol style="list-style-type: none">1) CREATE TABLE Developers (member_id INT PRIMARY KEY, name varchar(30), email varchar(320),influence_count INT, Joining_date date, multiplier INT);2) 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);
```

3) DESCRIBE Developers;

4) SELECT * FROM Developers;

No 2 SS
(of Query & Output
in Shell)

```
XAMPP for Windows - mysql -u root -p
MariaDB [(none)]> USE Google_22301518
Database changed
MariaDB [Google_22301518]> USE Google_22301518;
Database changed
MariaDB [Google_22301518]> CREATE TABLE Developers (member_id INT PRIMARY KEY, name varchar(30), email varchar(320),infl
uence_count INT, Joining_date date, multiplier INT);
Query OK, 0 rows affected (0.012 sec)

MariaDB [Google_22301518]> INSERT INTO Developers (member_id, name, email, influence_count, Joining_date, multiplier) VA
LUES(1, 'Taylor Otwell', 'otwell@laravel.com', 739360, '2020-06-10', 10),(2, 'Ryan Dahl', 'ryan@nodejs.org', 633632, '20
20-04-22', 10),(3, 'Brendan Eich', 'eich@javascript.com', 939570, '2020-05-07', 8),(4, 'Evan You', 'you@vuejs.org', 9826
30, '2020-06-11', 7),(5, 'Rasmus Lerdorf', 'lerdorf@php.net', 937927, '2020-06-03', 8),(6, 'Guido van Rossum', 'guido@py
thon.org', 968827, '2020-07-18', 19),(7, 'Adrian Holovaty', 'adrian@django project.com', 570724, '2020-05-07', 5),(8, 'Si
mon 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.c
om', 630488, '2020-05-10', 10);
Query OK, 11 rows affected (0.003 sec)
Records: 11  Duplicates: 0  Warnings: 0

MariaDB [Google_22301518]> DESCRIBE Developers;
```

Field	Type	Null	Key	Default	Extra
member_id	int(11)	NO	PRI	NULL	
name	varchar(30)	YES		NULL	
email	varchar(320)	YES		NULL	
influence_count	int(11)	YES		NULL	
Joining_date	date	YES		NULL	
multiplier	int(11)	YES		NULL	

Activate Windows
Go to Settings to activate Windows.

```
MariaDB [Google_22301518]> DESCRIBE Developers;
```

Field	Type	Null	Key	Default	Extra
member_id	int(11)	NO	PRI	NULL	
name	varchar(30)	YES		NULL	
email	varchar(320)	YES		NULL	
influence_count	int(11)	YES		NULL	
Joining_date	date	YES		NULL	
multiplier	int(11)	YES		NULL	

```
6 rows in set (0.012 sec)
```

```
MariaDB [Google_22301518]> 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)
```

```
MariaDB [Google_22301518]> _
```

No 3 Query
(as Plain Text)

1) ALTER TABLE Developers CHANGE influence_count followers INT;

No 3 SS
(of Query & Output
in Shell)

```

C:\> XAMPP for Windows - mysql -u root -p

MariaDB [Google_22301518]> 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)

MariaDB [Google_22301518]> ALTER TABLE Developers CHANGE influence_count followers INT;
Query OK, 0 rows affected (0.007 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [Google_22301518]> DESCRIBE Developers;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| member_id  | int(11)       | NO   | PRI | NULL    |       |
| name       | varchar(30)   | YES  |     | NULL    |       |
| email      | varchar(320)  | YES  |     | NULL    |       |
| followers  | int(11)       | YES  |     | NULL    |       |
| Joining_date | date         | YES  |     | NULL    |       |
| multiplier | int(11)       | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.011 sec)

MariaDB [Google_22301518]> _

```

Activate Windows
Go to Settings to activate Windows.

No 4 Query
(as Plain Text)

- 1) UPDATE Developers SET followers=followers+10;
- 2) SELECT*FROM Developers;

No 4 SS
(of Query & Output
in Shell)

```

C:\XAMPP for Windows - mysql -u root -p
+-----+-----+-----+-----+-----+
| member_id | int(11) | NO | PRI | NULL | |
| name      | varchar(30) | YES | | NULL | |
| email     | varchar(320) | YES | | NULL | |
| followers | int(11) | YES | | NULL | |
| Joining_date | date | YES | | NULL | |
| multiplier | int(11) | YES | | NULL | |
+-----+-----+-----+-----+-----+
6 rows in set (0.011 sec)

MariaDB [Google_22301518]> UPDATE Developers SET followers=followers+10;
ERROR 1054 (42S22): Unknown column 'followers' in 'field list'
MariaDB [Google_22301518]> UPDATE Developers SET followers=followers+10;
Query OK, 11 rows affected (0.006 sec)
Rows matched: 11  Changed: 11  Warnings: 0

MariaDB [Google_22301518]> 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)

MariaDB [Google_22301518]> _

```

No 5 Query
(as Plain Text)

- 1) ALTER TABLE Developers ADD COLUMN Efficiency FLOAT;
- 2) SELECT * FROM Developers;

- 3) UPDATE Developers SET Efficiency = ((followers*100/1000000) * (multiplier*100/20))/100;
- 4) SELECT name, Efficiency FROM Developers;

No 5 SS
(of Query & Output
in Shell)

```
XAMPP for Windows - mysql -u root -p
11 rows in set (0.000 sec)

MariaDB [Google_22301518]> ALTER TABLE Developers ADD COLUMN Efficiency FLOAT;
Query OK, 0 rows affected (0.006 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [Google_22301518]> SELECT * FROM Developers;
+-----+-----+-----+-----+-----+-----+
| member_id | name          | email              | followers | Joining_date | multiplier | Efficiency |
+-----+-----+-----+-----+-----+-----+
| 1         | Taylor Otwell | otwell@laravel.com | 739370    | 2020-06-10   | 10         | NULL       |
| 2         | Ryan Dahl     | ryan@nodejs.org    | 633642    | 2020-04-22   | 10         | NULL       |
| 3         | Brendan Eich  | eich@javascript.com | 939580    | 2020-05-07   | 8          | NULL       |
| 4         | Evan You      | you@vuejs.org       | 982640    | 2020-06-11   | 7          | NULL       |
| 5         | Rasmus Lerdorf | lerdorf@php.net     | 937937    | 2020-06-03   | 8          | NULL       |
| 6         | Guido van Rossum | guido@python.org    | 968837    | 2020-07-18   | 19         | NULL       |
| 7         | Adrian Holovaty | adrian@django project.com | 570734    | 2020-05-07   | 5          | NULL       |
| 8         | Simon Willison | simon@django project.com | 864625    | 2020-04-30   | 4          | NULL       |
| 9         | James Gosling  | james@java.com      | 719501    | 2020-05-18   | 5          | NULL       |
| 10        | Rod Johnson    | rod@spring.io       | 601754    | 2020-05-18   | 7          | NULL       |
| 11        | Satoshi Nakamoto | nakamoto@blockchain.com | 630498    | 2020-05-10   | 10         | NULL       |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.000 sec)

MariaDB [Google_22301518]> UPDATE Developers SET Efficiency = ((followers*100/1000000) * (multipliers*100/20))/100;
ERROR 1054 (42S22): Unknown column 'multipliers' in 'field list'
MariaDB [Google_22301518]> UPDATE Developers SET Efficiency = ((followers*100/1000000) * (multiplier*100/20))/100;
Query OK, 11 rows affected (0.003 sec)
Rows matched: 11 Changed: 11 Warnings: 0

MariaDB [Google_22301518]> SELECT * FROM Developers;
+-----+-----+-----+-----+-----+-----+
| member_id | name          | email              | followers | Joining_date | multiplier | Efficiency |
+-----+-----+-----+-----+-----+-----+
| 1         | Taylor Otwell | otwell@laravel.com | 739370    | 2020-06-10   | 10         | 36.9685    |
| 2         | Ryan Dahl     | ryan@nodejs.org    | 633642    | 2020-04-22   | 10         | 31.6821    |
| 3         | Brendan Eich  | eich@javascript.com | 939580    | 2020-05-07   | 8          | 37.5832    |
+-----+-----+-----+-----+-----+-----+
```

XAMPP for Windows - mysql -u root -p

11 rows in set (0.000 sec)

MariaDB [Google_22301518]> UPDATE Developers SET Efficiency = ((followers*100/1000000) * (multipliers*100/20))/100;
ERROR 1054 (42S22): Unknown column 'multipliers' in 'field list'

MariaDB [Google_22301518]> UPDATE Developers SET Efficiency = ((followers*100/1000000) * (multiplier*100/20))/100;
Query OK, 11 rows affected (0.003 sec)
Rows matched: 11 Changed: 11 Warnings: 0

MariaDB [Google_22301518]> SELECT * FROM Developers;

member_id	name	email	followers	Joining_date	multiplier	Efficiency
1	Taylor Otwell	otwell@laravel.com	739370	2020-06-10	10	36.9685
2	Ryan Dahl	ryan@nodejs.org	633642	2020-04-22	10	31.6821
3	Brendan Eich	eich@javascript.com	939580	2020-05-07	8	37.5832
4	Evan You	you@vuejs.org	982640	2020-06-11	7	34.3924
5	Rasmus Lerdorf	lerdorf@php.net	937937	2020-06-03	8	37.5175
6	Guido van Rossum	guido@python.org	968837	2020-07-18	19	92.0395
7	Adrian Holovaty	adrian@django-project.com	570734	2020-05-07	5	14.2683
8	Simon Willison	simon@django-project.com	864625	2020-04-30	4	17.2925
9	James Gosling	james@java.com	719501	2020-05-18	5	17.9875
10	Rod Johnson	rod@spring.io	601754	2020-05-18	7	21.0614
11	Satoshi Nakamoto	nakamoto@blockchain.com	630498	2020-05-10	10	31.5249

11 rows in set (0.000 sec)

MariaDB [Google_22301518]> SELECT name, Efficiency FROM Developers;

name	Efficiency
Taylor Otwell	36.9685
Ryan Dahl	31.6821
Brendan Eich	37.5832
Evan You	34.3924
Rasmus Lerdorf	37.5175
Guido van Rossum	92.0395

Activate Windows
Go to Settings to activate Windows.

XAMPP for Windows - mysql -u root -p

6	Guido van Rossum	guido@python.org	968837	2020-07-18	19	92.0395
7	Adrian Holovaty	adrian@django project.com	570734	2020-05-07	5	14.2683
8	Simon Willison	simon@django project.com	864625	2020-04-30	4	17.2925
9	James Gosling	james@java.com	719501	2020-05-18	5	17.9875
10	Rod Johnson	rod@spring.io	601754	2020-05-18	7	21.0614
11	Satoshi Nakamoto	nakamoto@blockchain.com	630498	2020-05-10	10	31.5249

11 rows in set (0.000 sec)

MariaDB [Google_22301518]> SELECT name, Efficiency FROM Developers;

name	Efficiency
Taylor Otwell	36.9685
Ryan Dahl	31.6821
Brendan Eich	37.5832
Evan You	34.3924
Rasmus Lerdorf	37.5175
Guido van Rossum	92.0395
Adrian Holovaty	14.2683
Simon Willison	17.2925
James Gosling	17.9875
Rod Johnson	21.0614
Satoshi Nakamoto	31.5249

11 rows in set (0.000 sec)

MariaDB [Google_22301518]>

Activate Windows
Go to Settings to activate Windows.

No 6 Query
(as Plain Text)

1) SELECT UPPER(name),Joining_date FROM Developers ORDER BY Joining_date DESC;

No 6 SS
(of Query & Output
in Shell)

```
XAMPP for Windows - mysql -u root -p
+-----+
| Taylor Otwell | 36.9685 |
| Ryan Dahl | 31.6821 |
| Brendan Eich | 37.5832 |
| Evan You | 34.3924 |
| Rasmus Lerdorf | 37.5175 |
| Guido van Rossum | 92.0395 |
| Adrian Holovaty | 14.2683 |
| Simon Willison | 17.2925 |
| James Gosling | 17.9875 |
| Rod Johnson | 21.0614 |
| Satoshi Nakamoto | 31.5249 |
+-----+
11 rows in set (0.000 sec)

MariaDB [Google_22301518]> SELECT UPPER(name) FROM Developers ORDER BY Joining_date DESC;
+-----+
| UPPER(name) |
+-----+
| GUIDO VAN ROSSUM |
| EVAN YOU |
| TAYLOR OTWELL |
| RASMUS LERDORF |
| JAMES GOSLING |
| ROD JOHNSON |
| SATOSHI NAKAMOTO |
| BRENDAN EICH |
| ADRIAN HOLOVATY |
| SIMON WILLISON |
| RYAN DAHL |
+-----+
11 rows in set (0.000 sec)

MariaDB [Google_22301518]> 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)

MariaDB [Google_22301518]>
```

Activate Windows
Go to Settings to activate Windows.

No 7 Query (as Plain Text)	1) SELECT member_id, name, email, followers FROM Developers WHERE email LIKE '%.com' OR email LIKE '%.net';

No 7 SS
(of Query & Output
in Shell)

```
XAMPP for Windows - mysql -u root -p
| ROD JOHNSON |
| SATOSHI NAKAMOTO |
| BRENDAN EICH |
| ADRIAN HOLOVATY |
| SIMON WILLISON |
| RYAN DAHL |
+-----+
11 rows in set (0.000 sec)

MariaDB [Google_22301518]> 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)

MariaDB [Google_22301518]> SELECT member_id, name, email, followers FROM Developers WHERE email LIKE '%.com' OR email LI
KE '%.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)

MariaDB [Google_22301518]> 
```

Activate Windows
Go to Settings to activate Windows.

