

Soon after joining Google's elite dev team, Area 120, you were assigned to a project using MySQL since it was your specialty. The project was a social media platform specialized in allowing developers from all over the globe to connect to each other, and it would have features similar to Facebook. For your first task, you have been assigned to work on the tables of one of the project databases. the table name is **"Developers"** which is shown below.

member_id	name	email	influence_count	Joining_date	multiplier
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@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

After clicking on the shell (a black window) type in the following command:

```
- mysql -u root -p
```

When you are asked for a password, don't type anything just press enter. The default password for xampp is an empty string.

```
XAMPP for Windows - mysql
Setting environment for using XAMPP for Windows.
injam@AKASH271022 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)]> show databases;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| performance_schema |
| phpmyadmin |
| test |
+-----+
5 rows in set (0.012 sec)

MariaDB [(none)]> create database Developers;
Query OK, 1 row affected (0.001 sec)

MariaDB [(none)]> use Developers;
Database changed
MariaDB [Developers]> |
```

1. Create the above table with the appropriate data type for each column.

- create table Developers  
(  
  member\_id int ,  
  name varchar(30) ,  
  email varchar(30) ,  
  influence\_count int ,  
  Joining\_date date ,  
  multiplier int  
);
- Show tables;

```

MariaDB [(none)]> use Developers;
Database changed
MariaDB [Developers]> create table Developers (
    -> member_id int primary key,
    -> name varchar(30) ,
    -> email varchar(30),
    -> influence_count int,
    -> Joining_date date ,
    -> multiplier int
    -> );
Query OK, 0 rows affected (0.008 sec)

```

```

MariaDB [Developers]> show tables;
+-----+
| Tables_in_developers |
+-----+
| developers            |
+-----+
1 row in set (0.000 sec)

```

- describe developers

```

MariaDB [Developers]> describe developers;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| member_id  | int(11)   | NO   | PRI | NULL    |       |
| name       | varchar(30) | YES  |     | NULL    |       |
| email      | varchar(30) | YES  |     | NULL    |       |
| influence_count | int(11)   | YES  |     | NULL    |       |
| Joining_date | date      | YES  |     | NULL    |       |
| multiplier | int(11)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.009 sec)

```

- insert into developers  
(member\_id,name,email,influence\_count,Joining\_date,multiplier)  
values  
(1,'Taylor Otwell','ryan@nodejs.org',739360,'2020-6-10', 10),  
(2,'Ryan Dah','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](mailto:you@vuejs.org)',982630,'2020-05-07',7),  
(5,'Rasmus Lerdorf','lerdorf@php.net',937927,'2020-06-11',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](mailto:nakamoto@blockchain.com)',630488,'2020-05-10',10);

- Select \* from developers;

```

+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| member_id  | int(11)   | YES  |     | NULL    |       |
| name       | varchar(30) | YES  |     | NULL    |       |
| email      | varchar(30) | YES  |     | NULL    |       |
| influence_count | int(11)   | YES  |     | NULL    |       |
| Joining_date | date      | YES  |     | NULL    |       |
| multiplier | int(11)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set (0.008 sec)

MariaDB [developers]> insert into developers (member_id,name,email,influence_count,Joining_date,multiplier)
-> values
-> (1,'Taylor Otwell','ryan@nodejs.org',739360,'2020-6-10', 10),
-> (2,'Ryan Dah','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,'2020-05-07',7),
-> (5,'Rasmus Lerdorf','lerdorf@php.net',937927,'2020-06-11',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 (0.002 sec)
Records: 11  Duplicates: 0  Warnings: 0

MariaDB [developers]> select * from developers;
+-----+-----+-----+-----+-----+-----+
| member_id | name      | email      | influence_count | Joining_date | multiplier |
+-----+-----+-----+-----+-----+-----+
| 1 | Taylor Otwell | ryan@nodejs.org | 739360 | 2020-06-10 | 10 |
| 2 | Ryan Dah | 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 | 2020-05-07 | 7 |
| 5 | Rasmus Lerdorf | lerdorf@php.net | 937927 | 2020-06-11 | 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 |
+-----+-----+-----+-----+-----+-----+
11 rows in set (0.000 sec)

MariaDB [developers]> |

```

2. Change the column name "influence\_count". The new name should be "followers," and the data type should be integer.

- alter table developers change column influence\_count followers int;

```

MariaDB [developers]> alter table developers change column influence_count followers int;
Query OK, 0 rows affected (0.005 sec)
Records: 0  Duplicates: 0  Warnings: 0

MariaDB [developers]> |

```

```
MariaDB [developers]> describe developers;
```

Field	Type	Null	Key	Default	Extra
member_id	int(11)	YES		NULL	
name	varchar(30)	YES		NULL	
email	varchar(30)	YES		NULL	
followers	int(11)	YES		NULL	
Joining_date	date	YES		NULL	
multiplier	int(11)	YES		NULL	

```
6 rows in set (0.008 sec)
```

3. Update the number of followers of each developer by +10.

- `update developers set followers= followers +10;`

```
MariaDB [developers]> update developers set followers= followers +10;
Query OK, 11 rows affected (0.003 sec)
Rows matched: 11  Changed: 11  Warnings: 0

MariaDB [developers]> select * from developers;
```

member_id	name	email	followers	Joining_date	multiplier
1	Taylor Otwell	ryan@nodejs.org	739370	2020-06-10	10
2	Ryan Dah	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	2020-05-07	7
5	Rasmus Lerdorf	lerdorf@php.net	937937	2020-06-11	8
6	Guido van Rossum	guido@python.org	968837	2020-07-18	19
7	Adrian Holovaty	adrian@djangooproject.com	570734	2020-05-07	5
8	Simon Willison	simon@djangooproject.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 [developers]> |
```

4. There is a formula to find the efficiency of the developers. Efficiency =  $((\text{followers} * 100 / 1000000) * (\text{multiplier} * 100 / 20)) / 100$ . Show the efficiency of each developer in a column named "Efficiency" along with their name.

- `select name ,((followers * 100 / 1000000) * (multiplier * 100 / 20)) / 100 AS Efficiency from developers;`

```
MariaDB [developers]> select name ,(((followers * 100 / 1000000) * (multiplier * 100 / 20)) / 100 AS Efficiency from developers;
+-----+-----+
| name | Efficiency |
+-----+-----+
| Taylor Otwell | 36.968500000000 |
| Ryan Dah | 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)
```

5. Show the name of the developers in UpperCase and the descending order of their Joining\_date.

- select upper(name) from developers order by Joining\_date desc;

```
MariaDB [developers]> select upper(name) from developers order by Joining_date desc;
+-----+
| upper(name) |
+-----+
| GUIDO VAN ROSSUM |
| RASMUS LERDORF |
| TAYLOR OTWELL |
| JAMES GOSLING |
| ROD JOHNSON |
| SATOSHI NAKAMOTO |
| EVAN YOU |
| BRENDAN EICH |
| ADRIAN HOLOVATY |
| SIMON WILLISON |
| RYAN DAH |
+-----+
11 rows in set (0.000 sec)
```

6. Retrieve the member\_id, name, email and followers of the developers who have either ".com" or ".net" in their email address.

- select member\_id,name,email,followers from developers where email LIKE '%.com%' OR email LIKE '%.net%';

```
MariaDB [developers]> select member_id,name,email,followers from developers where email LIKE '%.com%' OR email LIKE '%.net%';
+-----+-----+-----+-----+
| member_id | name          | email                | followers |
+-----+-----+-----+-----+
| 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    |
+-----+-----+-----+-----+
6 rows in set (0.000 sec)

MariaDB [developers]> |
```

----- END -----