CSE 370 LAB ASSIGNMENT 1

Name: Sadaf M. Anis, ID: 20101537, Section: 05

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

```
XAMPP for Windows - mysql -u root -p
MariaDB [370lab1]> create table developers (
-> member_id int,
    -> name varchar(30),
    -> email varchar (40),
    -> influence_count char(6),
-> joining_date date,
-> multiplier int);
Query OK, 0 rows affected (0.024 sec)
MariaDB [370lab1]> show tables;
  Tables_in_370lab1 |
 developers
 row in set (0.001 sec)
MariaDB [370lab1]> describe developers;
                                    | Null | Key | Default | Extra |
  Field
                    Type
  member_id
                                                    NULL
                      varchar(30)
  name
                                                    NULL
  email
                      varchar(40)
                                                    NULL
  influence_count
                      char(6)
                                                    NULL
  joining_date
                      date
                                                    NULL
  multiplier
  rows in set (0.019 sec)
```

```
Records: 11 Duplicates: 0 Warnings: 0
MariaDB [370lab1]> select * from developers;
                           | email
                                                  | influence_count | joining_date | multiplier |
 member_id | name
            Taylor Otwell
                           | otwell@laravel.com
                                                   739360
                                                                   2020-06-10
                                                                                       10
                                                                   2020-04-22
                                                                                       10
            Ryan Dahl
                            ryan@nodejs.org
                                                   633632
            Brendan Eich
                            eich@javascript.com
                                                   939570
                                                                   2020-05-07
                                                                                       8
            Evan You
                           you@vuejs.org
                                                   982630
                                                                   2020-06-11
            Rasmus Lerdorf
                            lerdorf@php.net
                                                   937927
                                                                   2020-06-03
                                                                   2020-07-18
            Guido van Rossum | guido@python.org
                                                   968827
                                                                                       19
            Adrian Holovaty
                            adrian@djangoproject.com |
                                                   570724
                                                                   2020-05-07
            Simon Willison
                            simon@djangoproject.com
                                                    864615
                                                                   2020-04-30
            James Gosling
                            james@java.com
                                                   719491
                                                                   2020-05-18
        10
                            rod@spring.io
                                                   601744
                                                                   2020-05-18
            Rod Johnson
            Satoshi Nakamoto | nakamoto@blockchain.com
                                                  630488
                                                                   2020-05-10
                                                                                       10
11 rows in set (0.001 sec)
```

2. Change the column name "influence_count". The new name should be "followers" and the data type should be integer

```
11 rows in set (0.001 sec)
MariaDB [370lab1]> Alter table developers change influence_count followers int;
Query OK, 11 rows affected (0.080 sec)
Records: 11 Duplicates: 0 Warnings: 0
MariaDB [370lab1]> select * from developers;
                                                         | followers | joining_date | multiplier |
 member_id | name
                              email
             Taylor Otwell
                              otwell@laravel.com
                                                              739360
                                                                      2020-06-10
                                                                                             10
             Ryan Dahl
                                ryan@nodejs.org
                                                             633632
                                                                      2020-04-22
                                                                                             10
             Brendan Eich
                                eich@javascript.com
                                                             939570
                                                                      2020-05-07
                                                                                              8
             Evan You
                                you@vuejs.org
                                                             982630
                                                                      2020-06-11
             Rasmus Lerdorf
                                lerdorf@php.net
                                                             937927
                                                                      2020-06-03
                                                                                              8
             Guido van Rossum
                                guido@python.org
                                                             968827
                                                                      2020-07-18
                                                                                             19
             Adrian Holovaty
         8
                                adrian@djangoproject.com
                                                              570724
                                                                      2020-05-07
             Simon Willison
                                simon@djangoproject.com
                                                              864615
                                                                      2020-04-30
             James Gosling
                                                              719491
        10
                                james@java.com
                                                                      2020-05-18
        11
             Rod Johnson
                                rod@spring.io
                                                              601744
                                                                      2020-05-18
        12 | Satoshi Nakamoto | nakamoto@blockchain.com
                                                              630488
                                                                      2020-05-10
                                                                                             10
11 rows in set (0.002 sec)
```

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

Ans:

```
MariaDB [370lab1]> update developers set followers = followers +10;
Query OK, 11 rows affected (0.002 sec)
Rows matched: 11 Changed: 11 Warnings: 0
MariaDB [370lab1]> 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
         3 | Brendan Eich
                               eich@javascript.com
                                                             939580
                                                                      2020-05-07
         5 | Evan You
                               you@vuejs.org
                                                             982640
                                                                      2020-06-11
                               lerdorf@php.net
         6 | Rasmus Lerdorf
                                                             937937
                                                                      2020-06-03
                                                                                             8
                               guido@python.org
           | Guido van Rossum |
                                                             968837
                                                                      2020-07-18
                                                                                             19
         8 | Adrian Holovaty
                               adrian@djangoproject.com
                                                             570734
                                                                      2020-05-07
            Simon Willison
                               simon@djangoproject.com
                                                             864625
                                                                      2020-04-30
        10 | James Gosling
                                james@java.com
                                                             719501
                                                                      2020-05-18
                                                             601754
        11 | Rod Johnson
                               rod@spring.io
                                                                      2020-05-18
        12 | Satoshi Nakamoto | nakamoto@blockchain.com
                                                             630498
                                                                      2020-05-10
                                                                                             10
11 rows in set (0.001 sec)
```

4. Show the name, email, and follower number of the developers.

```
MariaDB [370lab1]> select name,email,followers from developers;
                    email
                                                followers
 name
 Taylor Otwell
                    otwell@laravel.com
                                                   739370
 Ryan Dahl
                    ryan@nodejs.org
                                                   633642
 Brendan Eich
                    eich@javascript.com
                                                   939580
                    you@vuejs.org
 Evan You
                                                   982640
 Rasmus Lerdorf
                    lerdorf@php.net
                                                   937937
 Guido van Rossum
                    guido@python.org
                                                   968837
 Adrian Holovaty
                     adrian@djangoproject.com
                                                   570734
 Simon Willison
                     simon@djangoproject.com
                                                   864625
 James Gosling
                     james@java.com
                                                   719501
                                                   601754
 Rod Johnson
                    rod@spring.io
 Satoshi Nakamoto | nakamoto@blockchain.com
                                                   630498
11 rows in set (0.000 sec)
```

5. There is a formula to find the efficiency of the developers.

Efficiency = ((followers*100/1000000) * (multipliers*100/20))/100.

Show the efficiency of each developer in a column named "Efficiency" along with their name

aDB [3701	.ab1]> select * from	n developers;				
ember_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
5	Evan You	you@vuejs.org	982640	2020-06-11	7	NULL
6	Rasmus Lerdorf	lerdorf@php.net	937937	2020-06-03	8	NULL
7	Guido van Rossum	guido@python.org	968837	2020-07-18	19	NULL
8	Adrian Holovaty	adrian@djangoproject.com	570734	2020-05-07	5	NULL
9	Simon Willison	simon@djangoproject.com	864625	2020-04-30	4	NULL
10	James Gosling	james@java.com	719501	2020-05-18	5	NULL
11	Rod Johnson	rod@spring.io	601754	2020-05-18	7	NULL
	noa somison	1 . ode3b: 1118:10	001/54	2020-03-10	,	NOLL
iaDB [370] y OK, 11	Satoshi Nakamoto et (0.000 sec)	nakamoto@blockchain.com 	630498 +	2020-05-10 +	10	NULL +
rows in se iaDB [3701 ry OK, 11 s matched:	Satoshi Nakamoto et (0.000 sec) ab1]> update develorows affected (0.00	nakamoto@blockchain.com 	630498 +	2020-05-10 +	10	NULL +
rows in se iaDB [3701 ry OK, 11 s matched:	Satoshi Nakamoto at (0.000 sec) abl]> update develo rows affected (0.00 11 Changed: 11 N abl]> select * from	nakamoto@blockchain.com 	630498 + llowers*100/:	2020-05-10 +	10 tiplier*100/20	NULL +
rows in se iaDB [370] ry OK, 11 s matched: iaDB [370]	Satoshi Nakamoto at (0.000 sec) abl]> update develo rows affected (0.00 11 Changed: 11 N abl]> select * from	nakamoto@blockchain.com 	630498 + llowers*100/:	2020-05-10 +	10 tiplier*100/20	NULL +
rows in se iaDB [370] ry OK, 11 s matched: iaDB [370]	Satoshi Nakamoto et (0.000 sec) abl]> update develorows affected (0.00 11 Changed: 11 L abl]> select * from	nakamoto@blockchain.com ppers set Efficiency = ((fo 3 sec) Warnings: 0 developers;	630498 +	2020-05-10 1000000) * (mul- joining_date	10 tiplier*100/20 multiplier	NULL ;
rows in se iaDB [370] ry OK, 11 s matched: iaDB [370]	Satoshi Nakamoto at (0.000 sec) abl]> update develorows affected (0.00 11 Changed: 11 Labl]> select * from name Taylor Otwell	nakamoto@blockchain.com popers set Efficiency = ((fo 3 sec) Warnings: 0 developers; email otwell@laravel.com ryan@nodejs.org	630498 	2020-05-10 1000000) * (mul- 1 joining_date	10 tiplier*100/20 multiplier 10	NULL 70))/100 ; Efficiency 36.9685 31.6821
rows in se iaDB [3701 ry OK, 11 s matched: iaDB [3701 ember_id	Satoshi Nakamoto abil value value abil value	nakamoto@blockchain.com ppers set Efficiency = ((fo 3 sec) Warnings: 0 developers; email otwell@laravel.com	630498 	2020-05-10 1000000) * (mul- joining_date 2020-06-10 2020-04-22	10 tiplier*100/20 multiplier 10 10	NULL 70))/100 ; Efficiency 36.9685 31.6821
rows in se iaDB [3701 ry OK, 11 s matched: iaDB [3701	Satoshi Nakamoto abil update develorows affected (0.00 11 Changed: 11 Nabil select * from the following for the fo	nakamoto@blockchain.com ppers set Efficiency = ((fo	630498 1lowers*100/: followers 739370 633642 939580	2020-05-10 1000000) * (mul- joining_date 2020-06-10 2020-04-22 2020-05-07	10 tiplier*100/20 multiplier 10 10 8	NULL 9))/100 ; Efficiency 36.9685 31.6821 37.5832
rows in se iaDB [3701 ry OK, 11 s matched: iaDB [3701 ember_id 2 3 5	Satoshi Nakamoto abil update develorows affected (0.00 11 Changed: 11 Nabil select * from name Taylor Otwell Ryan Dahl Brendan Eich Evan You	nakamoto@blockchain.com ppers set Efficiency = ((fo	630498 	2020-05-10 1000000) * (mulified in the second in the seco	10 tiplier*100/20 multiplier 10 10 8 7	NULL 70))/100 ; Efficiency 36.9685 31.6821 37.5832 34.3924
rows in se iaDB [3701 ry OK, 11 s matched: iaDB [3701 ember_id 2 3 5 6	Satoshi Nakamoto at (0.000 sec) abl]> update develorows affected (0.00 11 Changed: 11 Labl]> select * from name Taylor Otwell Ryan Dahl Brendan Eich Evan You Rasmus Lerdorf	nakamoto@blockchain.com ppers set Efficiency = ((fo 3 sec) Warnings: 0 m developers; email otwell@laravel.com ryan@nodejs.org you@vuejs.org lerdorf@php.net	630498 1lowers*100/: followers 739370 633642 939580 982640 937937	2020-05-10 10000000) * (mul- joining_date 2020-06-10 2020-04-22 2020-05-07 2020-06-11 2020-06-03	10 tiplier*100/20 multiplier 10 10 8 7 8	NULL b))/100 ; Efficiency 36.9685 31.6821 37.5832 34.3924 37.51748
rows in se iaDB [370] ry OK, 11 s matched: iaDB [370] ember_id 2 3 5 6 7	Satoshi Nakamoto at (0.000 sec) abl]> update develorows affected (0.00 11 Changed: 11 Labl]> select * from name Taylor Otwell Ryan Dahl Brendan Eich Evan You Rasmus Lerdorf Guido van Rossum	nakamoto@blockchain.com ppers set Efficiency = ((fo 3 sec) Warnings: 0 m developers; email otwell@laravel.com ryan@nodejs.org eich@javascript.com you@vuejs.org lendorf@php.net guido@python.org	followers followers 739370 633642 939580 982640 937937 968837	2020-05-10 1000000) * (mul- joining_date 2020-06-10 2020-04-22 2020-05-07 2020-06-03 2020-07-18	10 tiplier*100/20 multiplier 10 10 8 7 8 19	NULL 0))/100 ; Efficiency 36.9685 31.6821 37.5832 34.3924 37.51748 92.039515
rows in se iaDB [3701 ry OK, 11 s matched: iaDB [3701 	Satoshi Nakamoto abi]> update develorows affected (0.00 11 Changed: 11 Nabi]> select * from name Taylor Otwell Ryan Dahl Brendan Eich Evan You Rasmus Lerdorf Guido van Rossum Adrian Holovaty Simon Willison James Gosling	nakamoto@blockchain.com ppers set Efficiency = ((fo	followers 739370 633642 939580 982640 937937 968837 570734	2020-05-10 1000000) * (mul- joining_date 2020-06-10 2020-05-07 2020-06-11 2020-06-03 2020-05-07	10 tiplier*100/20 multiplier 10 10 8 7 8 19 5	NULL 20))/100 ; Efficiency 36.9685 31.6821 37.5832 34.3924 37.51748 92.039515 14.26835
rows in se iaDB [3701 ry OK, 11 s matched: iaDB [3701 	Satoshi Nakamoto abil update develorows affected (0.00 11 Changed: 11 I abil select * from name Taylor Otwell Ryan Dahl Brendan Eich Evan You Rasmus Lerdorf Guido van Rossum Adrian Holovaty Simon Willison James Gosling Rod Johnson	nakamoto@blockchain.com ppers set Efficiency = ((fo 33 sec) Warnings: 0 m developers; email otwell@laravel.com ryan@nodejs.org eich@javascript.com you@vuejs.org lerdorf@php.net guido@python.org adrian@djangoproject.com simon@djangoproject.com	followers*100/: followers 739370 633642 939580 982640 937937 968837 570734 864625	2020-05-10 1000000) * (mul- joining_date 2020-06-10 2020-04-22 2020-05-07 2020-06-11 2020-06-13 2020-07-18 2020-07-08	10 tiplier*100/20 multiplier 10 10 8 7 8 19 5 4	NULL 20))/100 ; Efficiency 36.9685 31.6821 37.5832 34.3924 37.51748 92.039515 14.26835 17.2925

```
MariaDB [370lab1]> select name, Efficiency from developers;
                   Efficiency
 name
 Taylor Otwell
                        36.9685
 Ryan Dahl
                       31.6821
 Brendan Eich
                       37.5832
 Evan You
                       34.3924
 Rasmus Lerdorf
                      37.51748
 Guido van Rossum
                     92.039515
 Adrian Holovaty
                      14.26835
 Simon Willison
                       17.2925
 James Gosling
                     17.987525
 Rod Johnson
                       21.06139
 Satoshi Nakamoto |
                       31.5249
11 rows in set (0.000 sec)
MariaDB [370lab1]>
```