

CSE-370

## **Lab Assignment - 01**

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**Section:** 04

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(Snapshots from XAMPP-Shell)

## TASK-1

Create the table

Command to create table with appropriate data type

```
1 use cse370_db;
2 create table Developers
3 (
4     member_id int auto_increment,
5     name varchar(30),
6     email varchar(50),
7     influence_count int,
8     Joining_date date,
9     multiplier int,
10    primary key(member_id)
11 );
```

Show Result:

Your SQL query has been executed successfully.

```
show tables;
```

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ] [ [Create PHP code](#) ] [ [Refresh](#) ]

[Extra options](#)

**Tables\_in\_cse370\_db**

developers

Your SQL query has been executed successfully.

```
describe Developers;
```

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[Extra options](#)

Field	Type	Null	Key	Default	Extra
member_id	int(11)	NO	PRI	NULL	auto_increment
name	varchar(30)	YES		NULL	
email	varchar(50)	YES		NULL	
influence_count	int(11)	YES		NULL	
Joining_date	date	YES		NULL	
multiplier	int(11)	YES		NULL	

## Insert Data into Table

Command to insert data, (used NULL for member\_id as we are setting it on auto-increment.)

```
1 use cse370_db;
2 INSERT INTO developers values
3 (NULL, 'Taylor Otwell', 'otwell@laravel.com', 739360, '2020-6-10', 10),
4 (NULL, 'Ryan Dahl', 'ryan@nodejs.org', 633632, '2020-04-22', 10),
5 (NULL, 'Brendan Eich', 'eich@javascript.com', 939570, '2020-05-07', 8),
6 (NULL, 'Evan You', 'you@vuejs.org', 982630, '2020-06-11', 7),
7 (NULL, 'Rasmus Lerdorf', 'lerdorf@php.net', 937927, '2020-06-3', 8),
8 (NULL, 'Guido van Rossum', 'guido@python.org', 968827, '2020-07-18', 19),
9 (NULL, 'Adrian Holovaty', 'adrian@djangoproject.com', 570724, '2020-05-07', 5),
10 (NULL, 'Simon Willison', 'simon@djangoproject.com', '864615', '2020-04-30', 4),
11 (NULL, 'James Gosling', 'james@java.com', 719491, '2020-05-18', 5),
12 (NULL, 'Rod Johnson', 'rod@spring.io', 601744, '2020-05-18', 7),
13 (NULL, 'Satoshi Nakamoto', 'nakamoto@blockchain.com', '630488', '2020-05-10', 10);
```

Show Result:

✓ Showing rows 0 - 10 (11 total, Query took 0.0004 seconds.)

```
select * from Developers;
```

☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

		member_id	name	email	influence_count	Joining_date	multiplier
<input type="checkbox"/>	Edit Copy Delete	1	Taylor Otwell	otwell@laravel.com	739360	2020-06-10	10
<input type="checkbox"/>	Edit Copy Delete	2	Ryan Dahl	ryan@nodejs.org	633632	2020-04-22	10
<input type="checkbox"/>	Edit Copy Delete	3	Brendan Eich	eich@javascript.com	939570	2020-05-07	8
<input type="checkbox"/>	Edit Copy Delete	4	Evan You	you@vuejs.org	982630	2020-06-11	7
<input type="checkbox"/>	Edit Copy Delete	5	Rasmus Lerdorf	lerdorf@php.net	937927	2020-06-03	8
<input type="checkbox"/>	Edit Copy Delete	6	Guido van Rossum	guido@python.org	968827	2020-07-18	19
<input type="checkbox"/>	Edit Copy Delete	7	Adrian Holovaty	adrian@djangoproject.com	570724	2020-05-07	5
<input type="checkbox"/>	Edit Copy Delete	8	Simon Willison	simon@djangoproject.com	864615	2020-04-30	4
<input type="checkbox"/>	Edit Copy Delete	9	James Gosling	james@java.com	719491	2020-05-18	5
<input type="checkbox"/>	Edit Copy Delete	10	Rod Johnson	rod@spring.io	601744	2020-05-18	7
<input type="checkbox"/>	Edit Copy Delete	11	Satoshi Nakamoto	nakamoto@blockchain.com	630488	2020-05-10	10

☐ Check all | With selected: Edit Copy Delete Export

## TASK-2

Change column name

Alter table to change column name and data-type:

Command and affected results are shown below-

### SQL Command:

```
ALTER TABLE Developers CHANGE influence_count followers INT;
```

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0039 seconds.)

```
ALTER TABLE Developers CHANGE influence_count followers INT;
```

[ Edit inline ] [ Edit ] [ Create PHP code ]

✓ Showing rows 0 - 10 (11 total, Query took 0.0004 seconds.)

```
select * from Developers;
```

☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

		member_id	name	email	followers	Joining_date	multiplier
<input type="checkbox"/>	Edit Copy Delete	1	Taylor Otwell	otwell@laravel.com	739360	2020-06-10	10
<input type="checkbox"/>	Edit Copy Delete	2	Ryan Dahl	ryan@nodejs.org	633632	2020-04-22	10
<input type="checkbox"/>	Edit Copy Delete	3	Brendan Eich	eich@javascript.com	939570	2020-05-07	8
<input type="checkbox"/>	Edit Copy Delete	4	Evan You	you@vuejs.org	982630	2020-06-11	7
<input type="checkbox"/>	Edit Copy Delete	5	Rasmus Lerdorf	lerdorf@php.net	937927	2020-06-03	8
<input type="checkbox"/>	Edit Copy Delete	6	Guido van Rossum	guido@python.org	968827	2020-07-18	19
<input type="checkbox"/>	Edit Copy Delete	7	Adrian Holovaty	adrian@django project.com	570724	2020-05-07	5
<input type="checkbox"/>	Edit Copy Delete	8	Simon Willison	simon@django project.com	864615	2020-04-30	4
<input type="checkbox"/>	Edit Copy Delete	9	James Gosling	james@java.com	719491	2020-05-18	5
<input type="checkbox"/>	Edit Copy Delete	10	Rod Johnson	rod@spring.io	601744	2020-05-18	7
<input type="checkbox"/>	Edit Copy Delete	11	Satoshi Nakamoto	nakamoto@blockchain.com	630488	2020-05-10	10

↑ ☐ Check all With selected: Edit Copy Delete Export

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

## TASK-3

UPDATE The Value of followers column by adding 10

### SQL Command:

```
update Developers set followers = followers + 10;
```

✓ 11 rows affected. (Query took 0.0016 seconds.)

```
update Developers set followers = followers + 10;
```

[ Edit inline ] [ Edit ] [ Create PHP code ]

✓ Showing rows 0 - 10 (11 total, Query took 0.0003 seconds.)

```
select * from Developers;
```

☐ Profiling [ Edit inline ] [ Edit ] [ Explain SQL ] [ Create PHP code ] [ Refresh ]

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

		member_id	name	email	followers	Joining_date	multiplier
<input type="checkbox"/>	Edit Copy Delete	1	Taylor Otwell	otwell@laravel.com	739370	2020-06-10	10
<input type="checkbox"/>	Edit Copy Delete	2	Ryan Dahl	ryan@nodejs.org	633642	2020-04-22	10
<input type="checkbox"/>	Edit Copy Delete	3	Brendan Eich	eich@javascript.com	939580	2020-05-07	8
<input type="checkbox"/>	Edit Copy Delete	4	Evan You	you@vuejs.org	982640	2020-06-11	7
<input type="checkbox"/>	Edit Copy Delete	5	Rasmus Lerdorf	lerdorf@php.net	937937	2020-06-03	8
<input type="checkbox"/>	Edit Copy Delete	6	Guido van Rossum	guido@python.org	968837	2020-07-18	19
<input type="checkbox"/>	Edit Copy Delete	7	Adrian Holovaty	adrian@django project.com	570734	2020-05-07	5
<input type="checkbox"/>	Edit Copy Delete	8	Simon Willison	simon@django project.com	864625	2020-04-30	4
<input type="checkbox"/>	Edit Copy Delete	9	James Gosling	james@java.com	719501	2020-05-18	5
<input type="checkbox"/>	Edit Copy Delete	10	Rod Johnson	rod@spring.io	601754	2020-05-18	7
<input type="checkbox"/>	Edit Copy Delete	11	Satoshi Nakamoto	nakamoto@blockchain.com	630498	2020-05-10	10

↑ ☐ Check all With selected: Edit Copy Delete Export

## TASK-4

Efficiency =  $((\text{followers} * 100 / 1000000) * (\text{multiplier} * 100 / 20)) / 100$ .

Efficiency of each developer in a column named "Efficiency" along with their name -

### SQL Command:

```
select name, ((followers*100/1000000) *  
(multiplier*100/20))/100 as Efficiency from  
Developers;
```

Showing rows 0 - 10 (11 total, Query took 0.0003 seconds.)

```
select name, ((followers*100/1000000) * (multiplier*100/20))/100 as Efficiency from Developers;
```

☐ Profiling [\[ Edit inline \]](#) [\[ Edit \]](#) [\[ Explain SQL \]](#) [\[ Create PHP code \]](#) [\[ Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Extra options

				name	Efficiency
<input type="checkbox"/>	Edit	Copy	Delete	Taylor Otwell	36.968500000000
<input type="checkbox"/>	Edit	Copy	Delete	Ryan Dahl	31.682100000000
<input type="checkbox"/>	Edit	Copy	Delete	Brendan Eich	37.583200000000
<input type="checkbox"/>	Edit	Copy	Delete	Evan You	34.392400000000
<input type="checkbox"/>	Edit	Copy	Delete	Rasmus Lerdorf	37.517480000000
<input type="checkbox"/>	Edit	Copy	Delete	Guido van Rossum	92.039515000000
<input type="checkbox"/>	Edit	Copy	Delete	Adrian Holovaty	14.268350000000
<input type="checkbox"/>	Edit	Copy	Delete	Simon Willison	17.292500000000
<input type="checkbox"/>	Edit	Copy	Delete	James Gosling	17.987525000000
<input type="checkbox"/>	Edit	Copy	Delete	Rod Johnson	21.061390000000
<input type="checkbox"/>	Edit	Copy	Delete	Satoshi Nakamoto	31.524900000000

☐ Check all | With selected: Edit Copy Delete Export

## TASK-5

Show name in upper-class and sort them by descending order of joining\_date

### SQL Command:

```
select UPPER(name), Joining_date from Developers  
order by Joining_date DESC;
```































✓ Showing rows 0 - 10 (11 total, Query took 0.0003 seconds.) [Joining\_date: 2020-07-18... - 2020-04-22...]

```
select UPPER(name), Joining_date from Developers order by Joining_date DESC;
```

☐ Profiling [ [Edit inline](#) ] [ [Edit](#) ] [ [Explain SQL](#) ] [ [Create PHP code](#) ] [ [Refresh](#) ]

☐ Show all | Number of rows: 25 ▾ Filter rows:  Sort by ke

Extra options

				UPPER(name)	Joining_date ▾ 1
<input type="checkbox"/>				GUIDO VAN ROSSUM	2020-07-18
<input type="checkbox"/>				EVAN YOU	2020-06-11
<input type="checkbox"/>				TAYLOR OTWELL	2020-06-10
<input type="checkbox"/>				RASMUS LERDORF	2020-06-03
<input type="checkbox"/>				JAMES GOSLING	2020-05-18
<input type="checkbox"/>				ROD JOHNSON	2020-05-18
<input type="checkbox"/>				SATOSHI NAKAMOTO	2020-05-10
<input type="checkbox"/>				BRENDAN EICH	2020-05-07
<input type="checkbox"/>				ADRIAN HOLOVATY	2020-05-07
<input type="checkbox"/>				SIMON WILLISON	2020-04-30
<input type="checkbox"/>				RYAN DAHL	2020-04-22

## TASK-6

Show id, name, email, followers where email contains .com or .net. Used the LIKE keyword from SQL.

### SQL Command:

```
select member_id, name, email, followers from Developers where email LIKE '%.net%' or email LIKE '%.com%';
```

Showing rows 0 - 6 (7 total, Query took 0.0003 seconds.)

```
select member_id, name, email, followers from Developers where email LIKE '%.net%' or email LIKE '%.com%';
```

☐ Profiling [\[ Edit inline \]](#) [\[ Edit \]](#) [\[ Explain SQL \]](#) [\[ Create PHP code \]](#) [\[ Refresh \]](#)

☐ Show all | Number of rows: 25 Filter rows:  Sort by key: None

Extra options

		member_id	name	email	followers
<input type="checkbox"/>	Edit  Copy	1	Taylor Otwell	otwell@laravel.com	739370
<input type="checkbox"/>	Edit  Copy	3	Brendan Eich	eich@javascript.com	939580
<input type="checkbox"/>	Edit  Copy	5	Rasmus Lerdorf	lerdorf@php.net	937937
<input type="checkbox"/>	Edit  Copy	7	Adrian Holovaty	adrian@djangoproject.com	570734
<input type="checkbox"/>	Edit  Copy	8	Simon Willison	simon@djangoproject.com	864625
<input type="checkbox"/>	Edit  Copy	9	James Gosling	james@java.com	719501
<input type="checkbox"/>	Edit  Copy	11	Satoshi Nakamoto	nakamoto@blockchain.com	630498

☐ Check all With selected: Edit Copy

☐ Show all | Number of rows: 25 Filter rows:  Sort by key: None



## Add Commands as plain text :

### To Show Table Information

- **show tables;**
- **describe Developers;**

### To Create Database

- **create DATABASE cse370\_db;**

### To work in particular Database

- **use cse370\_db;**

### Task-1 (Create Table Column with data-types)

- **create table Developers**  
(  
    member\_id int auto\_increment,  
    name varchar(30),  
    email varchar(50),  
    influence\_count int,  
    Joining\_date date,  
    multiplier int,  
    primary key(member\_id)  
);

### Task-1 (Insert Info into Table)

- **INSERT INTO developers values**  
(NULL, 'Taylor Otwell', 'otwell@laravel.com', 739360, '2020-6-10', 10),  
(NULL, 'Ryan Dahl', 'ryan@nodejs.org', 633632, '2020-04-22', 10),  
(NULL, 'Brendan Eich', 'eich@javascript.com', 939570, '2020-05-07', 8),  
(NULL, 'Evan You', 'you@vuejs.org', 982630, '2020-06-11', 7),  
(NULL, 'Rasmus Lerdorf', 'lerdorf@php.net', 937927, '2020-06-3', 8),  
(NULL, 'Guido van Rossum', 'guido@python.org', 968827, '2020-07-18', 19),

```
(NULL, 'Adrian Holovaty', 'adrian@djangoproject.com', 570724, '2020-05-07',  
5),  
(NULL, 'Simon Willison', 'simon@djangoproject.com', '864615', '2020-04-30',  
4),  
(NULL, 'James Gosling', 'james@java.com', 719491, '2020-05-18', 5),  
(NULL, 'Rod Johnson', 'rod@spring.io', 601744, '2020-05-18', 7),  
(NULL, 'Satoshi Nakamoto', 'nakamoto@blockchain.com',  
'630488', '2020-05-10', 10);
```

## To Show all Data of Created Table

- **select \* from** Developers;

### Task-2

- **ALTER TABLE** Developers **CHANGE** influence\_count followers INT;

### Task-3

- **update** Developers **set** followers = followers + 10;

### Task-4

- **select** name, ((followers\*100/1000000) \* (multiplier\*100/20))/100 **as**  
Efficiency **from** Developers;

### Task-5

- **select UPPER(name), Joining\_date from** Developers **order by**  
**Joining\_date DESC;**

### Task-6

- **select** member\_id, name, email, followers **from** Developers **where** email  
LIKE '%.net%' or email LIKE '%.com%';