

Department of Computer Science and Engineering

Course Code: CSE 370	Credits: 3.0
Course Name: Database Systems	Semester: Fall 23

Lab Assignment 1

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
5	Evan You	you@vuejs.org	982630	2020-06-11	7
6	Rasmus Lerdorf	lerdorf@php.net	937927	2020-06-3	8
7	Guido van Rossum	guido@python.org	968827	2020-07-18	19
8	Adrian Holovaty	adrian@djangoproject.com	570724	2020-05-07	5
9	Simon Willison	simon@djangoproject.com	864615	2020-04-30	4
10	James Gosling	james@java.com	719491	2020-05-18	5
11	Rod Johnson	rod@spring.io	601744	2020-05-18	7
12	Satoshi Nakamoto	nakamoto@blockchain.com	630488	2020-05-10	10

Write the queries of the tasks given below [8 * 2 = 16].

1. Create the above table with appropriate data type for each column.
2. Change the column name "influence_count". The new name should be "followers" and the data type should be integer.
3. Update the number of followers of each developer by +10.

4. There is a formula to find the efficiency of the developers. $\text{Efficiency} = ((\text{followers} * 100 / 1000000) * (\text{multipliers} * 100 / 20)) / 100$. Show the efficiency of each developer in a column named "Efficiency" along with their name.
5. Show the name and email of the developers who have the 5 highest numbers of followers.
6. Show the name of all users with the maximum multiplier among the developers whose number of followers is less than 700000.
7. Find the average of the number of followers but only consider the members who joined before 11 June 2020.
8. Retrieve the member_id, name, email and followers of the developers who have either ".com" or ".net" in their email address.