Course Name: Database Systems	**Course Code: CS363L**
Assignment Type: Lab	**Dated: 14-02-2022**
Semester: 6th	**Session: 2019**
Lab/Project/Assignment #: Lab 5	**CLOs to be covered: CLO1 and CLO4**
Lab Title: Investigating Query Performance, Understanding GitHub dataset and learning Collaboratory	**Teacher Name: Ms. Darakhshan**

Lab Evaluation:

CLO1	Construct DML queries to retrieve and store data in different relations					
Levels (Marks)	**Level1**	**Level2**	**Level3**	**Level4**	**Level5**	**Level6**
Cognitive (5)						
					Total	**/5**
CLO4	Develop projects using learned techniques to solve real world problem with small/large data and learn how to query, visualize, report and make prediction on it.					
Levels (Marks)	**Level1**	**Level2**	**Level3**	**Level4**	**Level5**	**Level6**
Cognitive (5)						
					Total	**/5**

Rubrics for Current Lab:

Scale	Marks	Level	Rubric
Excellent	5	L1	Completed all questions (**including bonus/Q6**) and understands how tasks were solved + Have written optimized Queries and have used visualization techniques to understand dataset. Understands Github dataset, Python, BigQuery and their integration. No plagiarism.
Very Good	4	L2	Completed all questions (**except bonus**) and understands how tasks were solved. Students have used visualization techniques to understand dataset and know how to do this in Python. Worked upon optimized queries. Understands BigQuery and Python Integration Student understands Github dataset. No plagiarism.
Good	3	L3	Completed **Question 1, 2 and 3** and understands how tasks were solved. Student understand how to **visualize** datasets using Python and how to integrate BigQuery with Python. Student understands Github dataset and has worked on **writing optimized queries**. No plagiarism.
Basic	2	L4	Completed **Question I and 2 question only** + Integration of **BigQuery with Python** is complete + **Understands Query Efficiency**. Student understands Github dataset. No plagiarism.
Barely Acceptable	1	L5	Solved **Question I only** and **understands** the **dataset**. No plagiarism.
Not Acceptable	0	L6	Project missed or solved none of the problems

LAB DETAILS:

Lab Goals/Objectives:

- Project # 2 Out and its Demo
- Project # 1 Submission and Evaluation

Theory/Relevant Material:

- Read project documents carefully

Lab Tasks:

- Complete 1st section of Project 2
- Solve part (a), (b) and (c) of Section II of Project 2.

Submission Instructions:

Name your notebook of section 1 of project 2 as DBLab5_2019_CE_X.ipynb, add supporting SQL scripts of your homework and submit on Google classroom by Sunday, 20th February, 2022 9 P.M