

**University Of Engineering and Technology, Lahore**  
**Computer Engineering Department**

<b>Course Name: Database Systems</b>	<b>Course Code: CS363L</b>
<b>Assignment Type: Lab</b>	<b>Dated: 21-02-2022</b>
<b>Semester: 6<sup>th</sup></b>	<b>Session: 2019</b>
<b>Lab/Project/Assignment #: Lab 6</b>	<b>CLOs to be covered: CLO4</b>
<b>Lab Title: Visualizing Big Dataset (GitHub)</b>	<b>Teacher Name: Ms. Darakhshan</b>

**Lab Evaluation:**

<b>CLO4</b>	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.					
<b>Levels (Marks)</b>	<b>Level1</b>	<b>Level2</b>	<b>Level3</b>	<b>Level4</b>	<b>Level5</b>	<b>Level6</b>
Cognitive (5)						
<b>Total</b>						<b>/5</b>

**Rubrics for Current Lab:**

<b>Scale</b>	<b>Marks</b>	<b>Level</b>	<b>Rubric</b>
<b>Excellent</b>	<b>5</b>	L1	Completed all questions ( <b>including QIV a, b, c and d</b> ) 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. <b>Graph</b> is properly <b>formatted and labelled</b> . No plagiarism.
<b>Very Good</b>	<b>4</b>	L2	Completed <b>Question II and III</b> 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. <b>Graph</b> is properly <b>formatted and labelled</b> . No plagiarism
<b>Good</b>	<b>3</b>	L3	Completed <b>Question II and III (Language Dist.)</b> and understands how tasks were solved. Student understands how to <b>visualize</b> datasets using Python and how to integrate BigQuery with Python. Student understands Github dataset and has worked on <b>writing optimized queries</b> . <b>Graph</b> is properly <b>formatted and labelled</b> . No plagiarism.
<b>Basic</b>	<b>2</b>	L4	Completed <b>Question II (d), (e) and (f) question only + Understands Query Efficiency</b> . No plagiarism. No plagiarism.
<b>Barely Acceptable</b>	<b>1</b>	L5	Solved <b>Question II (d) only</b> and <b>understands the query optimization</b> . No plagiarism.
<b>Not Acceptable</b>	<b>0</b>	L6	Project missed or solved none of the problems

## **LAB DETAILS:**

### **Lab Goals/Objectives:**

- Visualization from Datasets using Python

### **Theory/Relevant Material:**

- Read project documents carefully

### **Lab Tasks:**

- Complete 2<sup>nd</sup> section of Project 2 (Query Optimization)
- Complete Section III and IV of Project 2. (Visualization)

### **Submission Instructions:**

Name your notebook of solved sections of project 2 as DBLab6\_2019\_CE\_X.ipynb, add supporting SQL scripts of your homework and submit on google classroom by Sunday, 27<sup>th</sup> February, 2022 9 P.M