

<b>Course Name: Database Systems</b>	<b>Course Code: CS363L</b>
<b>Assignment Type: Complex Engineering Activity</b>	<b>Dated: 24-01-2022</b>
<b>Semester: 6<sup>th</sup></b>	<b>Session: 2019</b>
<b>Lab/Project/Assignment #: Project 1</b>	<b>CLOs to be covered: CLO1, CLO4</b>
<b>Lab Title: Exploring NCAA Basketball Data</b>	<b>Teacher Name: Ms. Darakhshan</b>

**Complex Engineering Activity (CEA):**

	<b>Attribute</b>	<b>Complex Activities</b>	<b>Apply/Not Apply</b>	<b>PLOs Covered</b>	<b>Taxonomy Level</b>
<b>1</b>	Preamble	Complex activities means (engineering) activities or projects that have some or all of the following characteristics listed below:	N/A		
<b>2</b>	Range of resources	Involve the use of diverse resources (and for this purpose, resources include people, money, equipment, materials, information, and technologies).	Applicable		
<b>3</b>	Level of interaction	Require resolution of significant problems arising from interactions between wide-ranging or conflicting technical, engineering, or other issues.	Applicable		
<b>4</b>	Innovation	Involve creative use of engineering principles and research-based knowledge in novel ways.	N/A		
<b>5</b>	Consequences to society and the environment	Have significant consequences in a range of contexts, characterized by difficulty of prediction and mitigation.	N/A		
<b>6</b>	Familiarity	Can extend beyond previous experiences by applying principles-based approaches.	Applicable		

**CEA Description:**

In this Complex Engineering Activity, students will learn how to use big datasets for getting desired information using multiple tables. They will learn to write SQL queries to project, select and join information for multiple questions for a single database. In addition, students will learn the use of comparison and logical operators while writing queries to fetch particular information based on some conditions from the database.

**How to get started:**

Let's start our first project in lab. In this project, you will be using NCAA Basketball dataset available on BigQuery platform. You'll be writing standard SQL queries to answer the questions. Download the handout for the project at [https://cs145-fa21.github.io/docs/Project\\_1\\_Handout\\_2021.pdf](https://cs145-fa21.github.io/docs/Project_1_Handout_2021.pdf). At this stage, I hope you all have

explored BigQuery platform. In case of any ambiguity, you are free to visit the link [Getting Started with BigQuery](#). Download the [project1\\_submission.py](#) file and write all the queries into this file. If you collaborated with others to generate your queries, add their names and Registration numbers to the comment at the top of the project1\_submission.py file.

**Submission guidelines:**

Write the queries in a file and submit on google classroom by Sunday, 13<sup>th</sup> February, 2022 9 P.M. **In order to be correctly graded, the file must be named 2019-CE-X\_project1\_submission.py.**

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