Performance Task: GPA Analysis

Context: Your main priorities are to organize, analyze, and visualize critical pieces of data as efficiently and effectively as possible. Your goal is to drive actionable insights to help the organization learn and grow from our data.

Scenario: The Charter Group Leadership Team has an upcoming meeting next week. In preparation for the meeting, the Chief Academic Officer (CAO) has asked for your support. She has provided you with some raw data that she has collected from various sources across the organization, as well as some reference materials. She has asked you to review the data and provide her some insights as well as a visualization to give the team a high level sense of the academic state of the organization.

Your Materials:
- Provided data from the CAO - *note: this link will ask you to make a copy so you have your own sheet to reference*
- Grading Scale - *note: slightly adapted from our Student Handbook for clarity of calculation*
    - To allow for additional differentiation of student performance, as well as to award students for taking more rigorous classes, the Charter group defines its **weighted GPA** using the following grading scale:

Letter Grade	Percentage Range	GPA
A+	96.5 - 100	4.3
A	92.5 - 96.4	4.0
A-	89.5 - 92.4	3.7
B+	86.5 - 89.4	3.3
B	82.5 - 86.4	3.0
B-	79.5 - 82	2.7
C+	76.5 - 79.4	2.3
C	72.5 - 76.4	2.0
C-	69.5 - 72.4	1.7
D+	66.5 - 69.4	1.3
D	62.5 - 66.4	1.0
D-	59.5 - 62.4	0.7
F	0 - 59.4	0.0

- Honors classes are awarded 0.5 point bonus and Advanced Placement classes are awarded a 1.0 point bonus when calculating weighted grade point averages. This weight is **not** earned if a student is failing the class (i.e. has an "F").
- Advisory classes are issued "P" or "F" and earn credit, however, they **do not factor into grade point averages**.

Your Tasks:

- Load the data into a SQL Workspace for analysis. We recommend Google BigQuery, as this is the tool we use at the Charter Group.
- Analyze the data:
  - The CAO wants to be able to present on the **average GPA by campus**
  - She's not yet sure what else she wants to talk about, but she's hoping to be able to share two to three insights (including the above) - she's asking you to poke around the data and pull out a few additional insights
- Prepare a data visualization. We recommend Google Data Studio, as this is the tool we use. This doesn't need to be overly robust - what is most important to the CAO is that the visualization is clear and easily understood.