Project Instructions - Requirements & Guidelines

This project involves COVID-19 data from Johns Hopkins University's github as well as pandas and geopandas, and their dependency libraries, which are provided in a Jupyter Notebook file.

The project involves creating a program that provides COVID-19 reports for any US state county specified. A user is to be prompted to enter *any* county of interest, in which the program will provide a report relevant to the county (e.g. total new cases in 2021, average new cases in 2022, cumulative cases as of 12/31/22, etc.). Output information of the report is detailed below.

You are to reproduce the program by referring to the output illustration as presented below, but also test out your code with other counties to ensure its functionality (again, the report must cater to any county requested at the prompt). This is accomplished by referencing variables, as needed, in a print statement rather than hard typing specific values. Your program must include, but not limited to, the same structure, value format, text casing, line spacing, indentation and the type of information displayed.

This is a research project that will require a considerable amount of time for reviewing documentation (e.g, how to format large numerical values in a print function) and for debugging errors. You may use code that has or hasn't been covered in your class work (e.g., syntax that provides commas for large numerical values was not covered, but will be needed). Keep in mind this project involves real reported COVID-19 data, so the output values should make logical sense.

Your code must contain a minimum of six comments with brief statements throughout the script. This is to give the reviewer an idea of what certain lines of code will be doing. Do not create any user-defined functions for this assignment.

Use appropriate variable names as you code so it can be seamlessly understood when it is reviewed (abbreviations are acceptable, one letter variable names are not acceptable).

Your final code must be inside one code cell with the output shown below it in the provided Jupyter Notebook template file. Before submitting your completed work to Blackboard, please rename both files (.ipynb and .pdf) as your GMU username, then submit them to Blackboard.

Although your final code must be in one code cell for the Blackboard submission, it is highly recommended to work on the assignment using as many code cells as you need while tackling small subsequent portions of the project. Then consolidate your code into one cell and test it out to make sure it's working as intended.

An FAQ page is available and will be periodically updated when needed. You are expected to review this document.

This is an individual project that must be completed by yourself. Be aware that while the output for everyone's project is the same, the programming logic/syntax will vary from one coder to the other.