Link to github repo: https://github.com/gberrien/CS2

CS-Traffic
DS 1000 - Spring 2023 - Grace Berrien
Due: [Date TBU, come 2023]
Submission format: Link to github repository (check Collab assignments) and hard copy (in class)

Individual Assignment

General Description: Submit to Collab assignments a link to your case study repository and a hard copy of the README.md file to the head TA in class.

Preparatory Assignments - Class sessions about case study reading. Class sessions about logic and problem solving.

Why am I doing this? We read and produce solutions to case studies to practice thinking like a data scientist. In this example the focus is on problem solving and using a statistical approach and mindset. You are encouraged to work the case study on your own, do any outside research you find necessary, and finally improve your solution. Tackling the problem first without a real-world solution is a good chance to stretch yourself and then take in more information to locate your strengths and your weaknesses.
- Course Learning Objective: logic and problem solving
- Course Learning Objective: applied thinking
- Course Learning Objective: graphical/visual presentation of thinking

What am I going to do? You will begin by reading the one-page prompt for this case study. In that prompt you will be given a challenge. Take time to reflect on that and make notes. If you have ideas, play with them and come up with thoughts. Then make a plan to produce the main deliverable. That deliverable is a statistical test analyzing differences in traffic-related accidents before and during the COVID-19 pandemic. All related results must be stored in the github repository. As you develop your solution, be sure to include all resources and materials in this repo. You must include your test's conclusions on whether traffic-related accidents increased during the COVID pandemic.

Tips for success:
- Have fun.
- Don't constrain yourself
- Take time to think about the prompt before digging into the meat of the coding. Think of a strategy beforehand.

How will I know I have succeeded? You will meet expectations on CS-Traffic Case Study when you follow the criteria in the rubric below.

Spec Category	Spec Details
Formatting	- Repository - A new github repository - Create a new github repo for this assignment containing: - README.md - LICENSE - SRC Folder - FIGURES Folder - DATA Folder

Github Requirement: README.md	● Goal: This file should provide a high-level overview of every folder within your repo. You should state a summary of your key findings. ● Structure this file in such a way to be easily readable by an individual who has read the prompt ○ Include your hypothesis ○ A summary of any additional data used/research completed ○ A summary of your conclusions after having performed the statistical test
LICENSE.md	● Goal: This file explains to a visitor the terms under which they may use and cite your repository. ● Select an appropriate license from the GitHub options list on repository creation. ● Usually, the MIT license is appropriate.
SRC Folder	● Goal: Include any code you use to produce your statistical test and to filter and sort to the data to your liking ● Should contain: ○ At least one image of relevant coding ○ At least one image of a figure used to generate ideas to form your hypothesis ○ At least one image of a results from your statistical test
DATA folder	● Goal: Include any extra data sources you might use to contextualize your research or take the study a step further, beyond using the provided dataset (provided below):: https://www.kaggle.com/datasets/mysarahmadbhat/nyc-traffic-accidents?resource=download
Figures folder	● Goal: Include all images you embed in your readme file ● This folder will contain images/any visualizations you create
Assessment	● Take into consideration both this rubric and also Eric Adams's program on preventing traffic fatalities. To what extent did traffic accidents increase during COVID? Are there other ways you can think of to decrease these accidents? Provide at least one alternative to this campaign.
References	● Include any additional research/sources you use to complete this project