Week05_01_activity

May 3, 2023

Week05.1 Team Activity

Due Thursday May 4th, 2023 by 11:59pm - please upload PDF with photograph (either rendered or a separate file)

If you missed class – no credit for this activity, instead, I drop two unexcused absences from the Monday/Wednesday activities before deductions begin.

- **Please identify your team & the names of your teammates.**
- **Please insert a team photo somewhere in this notebook. If you cannot get the to render correctly to PDF please upload a separate file of the photo**
- **Please make certain that all of your teammates agree upon and understand the team answers. Thank you.**

Dear Teams

There is a dataset named "tc.csv" which contains traffic collision records for Los Angeles City from 1/1/2019 to 12/31/2022 (so pre & post pandemic). It can be found under this activity in Week 5 of BruinLearn or it can be found in Week 5 of my GitHub repository for this class.

Please attempt to complete as many of the following as a team, there is no expectation of completing this during class or completing all of them, instead, I would like you as a team to work on this over the next day outside of class as practice for the final team project:

1. Convert it to a Pandas DataFrame. What might be an effective way to convert the values in its "Date Occurred" column to a more correct type?
2. What are two ways we can set the DataFrame index to store the DR Number (first column of the data)? Which way might be more efficient (pretend this data was much larger).
3. Run a set (your choice) of descriptive statistics, counts, etc. on any field (column) to develop a "sense" of the data and the story it tells about driving/auto accidents in LA.
4. How do we use pandas to count the number of accidents per Area ID or Area Name in this data set?
5. What is the most dangerous intersection in Los Angeles? There are many ways to define this, but let's try "as measured by number of accidents" or (more challenging) the number of fatalities (MO Code would have a 3027)

As always, what is important is a team effort and that everyone on the team has an idea of how to program these things and also feels free to ask the team for more understanding.

Because we are in the process of forming final teams, if you are having trouble coming together as a team to complete an assignment like this one, you should look for a different team for the next activity.

What to submit for credit

- Please upload the Jupyter Notebook (.ipynb) and PDF (preferred) OR .html (OK) to Bruin Learn with your team attempt. Please make sure every team member understands the contents of the notebook.
- This is due before 11:59pm Thursday 5/4/2023