Please use the following outline to prepare weekly homework to turn in. This is meant to be less of a paper and more along the lines of process/research documentation. Do not write one sentence for each section. Vague responses will receive point deductions up to and including zero credit. You get as much out of it as you put into it and your final grade will reflect your level of effort. Elaborate/explain and defend your reasoning throughout the write up. To do so will require additional reading and research beyond the weekly reading materials provided in the course. Google is your friend.

Imagine that I just joined the team and this is my first "real" job since college. I just got hired to replace you because you just got promoted for a bigger and better position (yay!). On a different team, in a completely different department. So you are not there to help get me started or mentor me until I am more familiar and comfortable in the position. No one else on the team really knew what/how you did what you did in enough detail to explain it to me. Your documentation is all I have to go on.

The sections below are a suggested outline for assignment write-ups. Please provide as much detail as you would for someone that will be performing your duties without you around to aid or answer questions. That doesn't mean that you will answer every question, but your documentation should provide enough detail that I can repeat your process and grasp the workflow. I should be able to understand why you are performing the analysis, how you did it, and the results without you standing over my shoulder to explain it. The conclusion will tell me what worked, what didn't, why you chose to do or not do something one way versus another, or how you might do something differently as well as your feelings on the overall project.

This is a master's program; therefore, do not expect that all the answers will lie in the assigned readings. Be sure to site sources in section VI. This includes the weekly reading material.

Your Name
Date
Week #/Assignment Name
Class
Professor

I. Introduction (10 points).
Write up a paragraph describing the assignment and how it relates to the weekly topic and reading assignment. DO NOT ASSUME that I know what the assignment is about. What data are you using? What analysis will you be performing? Set the scene for the reader. These assignments will make a great writing sample when applying for jobs.

II. Methods/Code (20 points).

This section should be a write up of the steps taken to complete the weekly assignment. Explain what the code is designed to do. Was the outcome what you expected? Why or why not?

Include screenshots if applicable (i.e. For installations such as Python, Cloudera, or similar please provide screenshots.) Code can be screenshots or text.

*III. Results/Output (20 points).
Your output should be snapshots/screenshots (especially when producing graphs and plots).

In the event any package or installation does not work for you, submit any error messaging as your output.

*IV. Analysis of Results (20 points).
Discuss your results.

Answer any lab questions that might be included in the assignment here. Read the assignment carefully, occasionally there are questions throughout that need to be addressed in your write up. Do not forget to include them.
What did you expect before completing the assignment and was that the outcome? Why or why not? Were any of the outcomes not what you expected? Why do you think that is so?

Some of the questions above may be included in the Conclusion section. Just be sure to include them in one or the other.

V. Conclusion (20 points).
Write a summary paragraph about the overall assignment, your results, and findings.

Be thoughtful and include ideas such as:

- Positive and/or negatives to applying this type of exercise in the real world?
- How would this technology or data science apply to your field?
- What other fields do you think it would useful?
- If this was your first experience with a topic or program, what did you think? Are you looking forward to learning more? Why or why not.

Don't just tell me you had fun or struggled to complete the assignment. Why? What was fun? What did you struggle with and what do you think would have made your experience better? Discuss the outcome of the lab. What industries or professional roles do think might apply the concepts applied in the assignment? Not sure? GOOGLE IT.

VI. References (10 points).

Site sources used to work through and/or write up your assignment. This includes the weekly reading for the assignment, online articles or papers, internet links, etc. that you found useful to complete this assignment.

*Please feel free to combine sections III (Results/Output) and IV (Analysis of Results). Sometimes it is easier to write about the analysis of the screenshot/code in the order that the analysis is provided.