Problem statement  - how well defined and can be solved through data science (10):

Abstract and key words (5)

Literature Review  - (10)

Methodology  (20)

Results - what did you learn, how did you present them in a clear easy to understand manner (15)

Summary, Next Steps and Conclusion  - (10)

Appendices -giving me real code I can run (ideally the file you created from running your code from RStudio or jupyter notebook with code and results) (5)

References  (5)   
Oral Presentation  (10)   
Quality of Writing  (10) very easy to read.  Flows well (10/10)  
Please submit your final research project materials (report, presentation, data, code, etc.) no later than **Tuesday** **May 14. Grammar matters!**

**Presentation (provide video link).** You will have 30 minutes to present your work. You shall:

* Introduce yourselves and describe your problem.
* Explain your objectives, challenges of your work, proposed methodologies, and the assumptions you made while conducting modeling and/or analysis.
* Provide an overview of your approach and/or conceptual model (please do not present your code directly).
* Describe the results you obtain and summarize the current achievements and possibility of future works.

**Final Report.** The final project report should be similar to the technical papers you read in the literature. The report should be approximately 20 pages (single-spaced, 12pt font, Times New Roman, 1" margins). (Appendices do not count in the page limit). Please number the pages. The report should (at least) include the following sections:

* Abstract: use 250 words or less to summarize your problem, methodology, and major outcomes.
* Key words: select a few key words (up to five) related to your work.
* Clear Problem Statement – All above 2 pages
* Literature review: discuss how other researchers have addressed the similar problems, what their achievements are, and what the advantage and drawbacks of each reviewed approach are.  Explain how your investigation is similar or different to the state-of-the-art.  Please do not discuss paper one at a time, instead, identify key characteristics of your topic, and discuss them in a whole. Please cite the relevant papers where appropriate. – at least 10 cites – 3 pages
* Methodology: discuss the key aspects of your model/problem. If you work on real data, explain how you verified your model. If you work on theoretical aspects of data science advancement, explain your method with details (you can put the theory and proof in the appendix if you see fit). – 3 pages
* Results and/or experimentation: describe what you did (validation, experimental design, study of the theories, etc.), and what you found out (statistical analysis, comparison of various approaches, system performance improvement, optimization, new algorithm development, etc.).  Use visuals to help tell the story – 10 pages
* Summary and future works: conclude your findings, suggest areas for future work.  How well did you answer the problem statement? – 2 pages
* Bibliography
* Appendices (put your detailed code here.)
* Video link to presentation describing your work