Introduction to Data Science

Based on the videos and the reading material, how would you define a data scientist and data science? (3 marks)

As discussed in the videos and the reading material, data science can be applied to problems across different industries. What industry are you passionate about and would like to pursue a data science career in? (1 mark)

I have an undergraduate degree in Chemical Engineering and would like to study data science methodologies to learn how data analysis could be applied to derive business insights from plant operating datasets and help businesses gain a competitive advantage.

Based on the videos and the reading material, what are the ten main components of a report that would be delivered at the end of a data science project? (5 marks)

Prescribed format for report should include:

1. Cover page
2. Table of Contents
3. Introductory Section—sets up the problem for the reader new to the topic
4. Literature Review—provides a follow up to the introductory section and gives a review of the available and relevant literatures
5. Methodology Section—introduce the research methodologies and the data sources used for the analysis
6. Results Section—present empirical findings and illustrative graphics to support the findings
7. Discussion Section—presents the main arguments of the report based on results presented earlier
8. Conclusion Section—generalize the findings in the report and identify areas of potential research and development opportunities
9. Acknowledgements
10. References
11. Appendices (if required)