



1. Based on the videos and the reading materials how would you define a data scientist and data science? (3 Point)

Data Scientist:

A *Data Scientist* is a person who is curious, judgemental, and assertive, with basic knowledge on different fields and can analyze the given data irrespective of the size, with appropriate tools and algorithms to identify the patterns, quantify the relations, and narrate the findings to the relevant stakeholders.

Data Science:

Data Science has no exact definition due to its vast applicability in different fields. It can be simply described as the work of a Data Scientist, which results in distinct solutions which traditional methods cannot provide.

2. 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 Point)

As a computational and simulation engineer, I see a vast scope in improvements in Computational Fluid Simulations, especially for predictive flow simulations which would require much less computing power. It can be applied to different fields ranging from automotive to process engineering

3. 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 Point)

The ten main components of a report are:

- **1. Cover Page -** describes Report title, authors and their affiliations, publication institute and date
- 2. Table of Contents a road map to the contents of the report
- **3. Abstract -** The crux of the arguments given in the report
- **4. Introductory section -** Set up the problem being addressed
- **5. Literature Review -** For new readers, this gives a deeper understanding of research questions and understandings
- 6. Methodology Explains the research methods used and data sources
- 7. Results Gives the empirical findings with points and graphs
- 8. Discussions Explain in detail the main argument with supporting data from
- **9. Conclusion -** Generalize the specific findings and promote the needed future activities
- 10. House Keeping References, Acknowledgement and Appendices (if needed)