Project Title * Final Assignment – IBM Data Science, Course 1 – What is Data Science?

1. Introduce yourself and share with your peers your background and any experience you have with data science. **(1 mark)**

   My name is Linda; I live in New Jersey, USA. I have Masters degrees in Computer Science, and Professional and Technical Communication. After graduation with my CIS degree I worked for major corporations as a programmer and systems analyst. Prior to that, I studied veterinary medicine and worked in the field with the dream of becoming a veterinarian. But soon it became clear to me that I was not cut out to be a veterinarian. Even so, I still have a great interest in the field.

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

   A data scientist is someone who is curious, who takes a position, who learns from the data to answer a question, gain insight, explain phenomena. A data scientist uses algorithms and tools such as Data Visualization, Machine Learning, Neural Networks, etc. to analyze data. As a result of that data analysis, a data scientist tells a story. As such, a data scientist must have computer skills, analytical skills, and communication skills.
   Data Science is the process by which a data scientist works with a set of data (structured, unstructured, or both) by manipulating it, exploring it, analyzing it to illicit insights, and answer questions. In short, Data Science is the process by which raw data is transformed into actionable insights.
   With data being ubiquitous, data scientists and data science span across a vast array of industries and disciplines.

3. 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 am passionate about the medical industry, specifically veterinary medicine. I have an idea for a veterinary medicine teaching application; as I am learning more about data science I am exploring ways that I can use it in my application.

4. 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)**

   1. Cover Page – includes title, authors and contact information, publication date
   2. Table of Contents
   3. Abstract or Executive Summary – a high level explanation of the documented work
   4. Introductory Section – set up the problem, introduce the topic to the reader
   5. Literature Review – relevant research on the subject matter of the documented work
   6. Methodology – research methods and data sources used in the analysis
   7. Results – empirical findings including statistics and graphics
   8. Discussion – main arguments based upon analytical results

9. Conclusion – generalize the documented findings and look to the future
10. Housekeeping: References, Acknowledgements to contributors to the work, and Appendices (if applicable)