Big data is a collection of data that is huge in volume but is also continuously growing exponentially with time. It refers to this data that is so large, fast, and complex that it is difficult or even impossible to process using traditional methods of data handling. Big data is important because of all that you can do with it. You can take this data and analyze it for different types of information that could help you with decision making in whatever field you are working in. There are three types of big data: structured, unstructured, and semi-structured data. Structured data is highly organized with dimensions defined by set parameters and is easiest to work with. This data usually involves spreadsheets. Unstructured data is unorganized data and is what is most seen in big data. This data needs to be understood and organized by applications, often making it difficult to work with. Sem-structured data lies between structured and unstructured data. This data is usually unstructured data with meta data attached to it, such as an image you take that has time, location, and device data attached to it. The three V’s of big data are Volume, Velocity, and Variety. Volume represents the collection of data from a variety of sources and storing them. Velocity involves the speed at which data is being collected and that must be handled in a timely manner. Variety represents the different formats data comes in.

Learning Report Summary

I have successfully completed my assignment and it has run without any errors. I got the correct results based on what is seen and asked for in the book. I spent roughly 2 hours on this assignment. I found the assignment to be fairly straightforward. I wrote the program myself and received help from no one but the book. When encountering obstacles in the creation of this program, I mostly looked to the book for help. I did not use the internet to help other than for the creation of the paper. From this assignment, I learned what big data is and also how to use sql, pandas, and python to analyze some data. I do not have anything else to share with the professor at this time.