1. Machine Learning is the process of using datasets to train a computer to recognize trends
2. Patterns are recognized through the data that is collected. The data must first be organized in a way such that it can recognize patterns more accurately. The patterns are then used to make predictions on future data. To have accurate predictions, the patterns must be accurately recognized.
3. AI is a computer that can act in a way that a human would. ML is an application of AI that trains a computer to recognize patterns the way a human would.
4. Machine learning is used in self-driving cars. A self-driving car can't be built without ML because the car needs to recognize patterns of the local streets as well as other drivers. While there are a lot of rules of driving that can be learned beforehand, a big part of driving is analyzing patterns of when it's okay to drive straight, change lanes, turn, slow down, or stop. ML is also used in social media platforms to decide what to recommend the user. This can't be done with traditional programming because there are patterns that need to be recognized in what the user views and likes to determine what the viewer would like to see in the future.
5. An observation is a row in a data table. A feature is a column in the data table. Quantitative data is numerical and qualitative data is categorical. Features are different piece of information that is collected, while observations are an object from which the features are collected.
6. I am interested in learning how ML is performed as well as what can be done with ML. Currently, I'm trying to figure out if I would enjoy ML, but if do I end up enjoying it, I would be interested in implementing it into a side project. I might even go as far as pursuing a master and career in this field if I really enjoy it.