STATISTICS :

ASSIGNMENT 1

1. What is the difference between Data Analysis and Machine Learning

- Analytics relies on existing information to find patterns that ultimately shape decisions. Whereas machine learning depends on existing data that provides the base for the machine to learn for itself.
- Analytics reveals patterns through the process of classification and analysis while ML uses the algorithms to do the same as analytics but in addition, learns from the collected data.
- Data analytics ultimately aims to find patterns whereas ML aims to learn from data and make estimates and predictions.

2. What is a big data ?
    - Those datas which describes petabyte or higher. They are structured or unstructured collected data that can be mined for information and used in advanced analytics applications.
    - Big data is often categorized by 5 V's:
        Value
        Variety
        Velocity
        Volume
        Veracity
    - Big data benefits in reduced costs, enhanced sales and efficiency
3. What are the four main things to know before data analysis
    - Data requirements
    - Data collection
    - Data processing
    - Data cleaning
4. What are the four main characteristics in descriptive Statistics
        - Measures of central tendency
        - Measures of dispersion
        - Kurtosis
        - Skewness

5. What is Quantitative and Qualitative Analysis

Quanlitative	Quantitative
Information about qualities Datas are not measurable (can't count) **Two types : nominal and ordinal** example: An employee's highest qualification	**information about quantities** Datas are measurable (can count) Two types - can be discrete or continuous example: price of products