**Assignment 1**

Q1. What is the difference between data analysis and Machine learning?

Data Analysis is a process of understanding the data, find patterns and try to obtain inferences due to which the underlying patterns are observed. Machine learning is when you train a system to learn those patterns and try to predict the upcoming pattern.

Q2. What is Big Data?

The term big data refers to structured and unstructured data that cannot be handled with traditional method related to data storage, ingestion and extraction tools.

Q3. What are the four main things we should know before studing data analysis?

1. SQL
2. Microsoft Excel
3. Data visualization and presentation skills
4. Machine Learning

Q4. Most common characteristics used in Descriptive statistics?

The three most common descriptive statistics can be displayed graphically or pictorially and are measures of : Graphical/Pictorial Methods, Method of Central Tendency.

Q5. What is quantitative data and qualitative data?

Quantitative data are measures of values or counts and are expressed as numbers examples are weight, Age, Height, Distance, etc.

Qualitative data is the descriptive and conceptual findings collected through questionnaires, interviews, or observations. Example video/audio recording, photographs, Documents, etc.