**Assignment no.1**

1. **What is the difference between data analysis and machine learning?**

* **Data Analysis:** Data Analysis is to analyze the data in a different manner to achieve some meaningful output from the Data. Analysis should be varying from person to person according to their mind set. Analysis may be done on the basis observation, prediction, interpretation, Research or many more.

For e.g. If you have a grocery shop and there are lots of data of The customers like Name, Number, DOB, Quantity of items they buy, Buying Behavior, Visiting behavior, Payment done on cash or a card. Now you are analyzing that most number of customer visits the shop most frequently and for Chocolate items. So what you have done is put a Chocolate showcase in front of the billing section. In this you are targeting Customer who is Chocolate love.

1. **What is big data?**

Big data is a data which is very big in size (In the range of peta-data or higher).

1. **Which are the most commonly characteristics used in descriptive statistics?**

There are two characteristics-

* Measures of Central tendency-

Mean, Median & Mode

* Measures of spread.

1. **What are the main things we should know before studying Data-analyst?**

There are four things-

-to know what is Data

-Database: where to record the data.

-How data matters to us.

-to have knowledge of SQL

1. **What is quantitative and qualitative data?**

* **Quantitative data:** The things which we can measure the data is called quantitative data. For e.g.

**-**No. of student

**-**No. of Teacher

**-**No. student present.

**-** Age

**-**Height

**-**Weight

There are two types of data:

-Discrete Data

-Continuous Data

* **Qualitative Data:** The Data which we cannot measure is called qualitative data. For e.g.

**-**Behavior

**-**Smell

**-**Feeling

**-**Taste

**-**Performance

There are two types of Data:

-Nominal Data

-Ordinal Data