1. **What is Data?**
   Data is the collection of information.

2. **What is the importance of the Data?**
   Data is important because it provides insights for analysis and help us to make better business decisions.

3. **What are the types of Data?**
   There are 2 types of data
   A) **Categorical**: It represents categories or groups. It can be any text value or meaning less numerical value (ie gender Male=1 and Female=2, in the data if we have 1 or 2 for gender columns consider as categorical data type)
   Example: Car brands (No hierarchy, do you have Car? (Yes/No or True/False questions)

   B) **Numerical**: It represents numbers or decimal values.
      a) *Discrete*: Anything that you can express in number. It holds finite number of possible values. It is the whole(integer) number
      Eg: Number of students in class. Number of people in the house.

      b) *Continuous*: Possible numeric values It holds infinite number of possible values. That means in a scale between 1 to 2, we have infinite possible values between 1 and 2. It can be 1.2, 1.34, 1.4578, 1.9876543 and so on
      Eg: Weight of the person can be 50.2kg or 62kg or 58.002kg and so on. Height of the person

4. **Measurement levels of Data?**
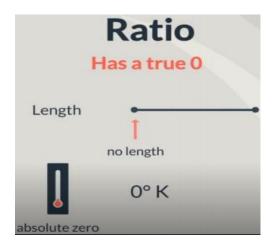   Measurement levels are sub-divided into Qualitative and Quantitative.
   A) **Qualitative**:
      a) *Nominal***:** Data with name or label. Data with no-inherent order/ranking. Just like Categorical Data. Such as Gender, Pepsi, Coke, Vinay

Are you married?

○ Yes

○ No

What languages do you speak?

○ Englisch

○ French

○ German

○ Spanish

      b) *Ordinal***:** Data/categories with rank/order series such as Good, Average, Below Average and Bad

What Is Your Educational Background?

○ 1 - Elementary

○ 2 - High School

○ 3 - Undegraduate

○ 4 - Graduate

B) **Quantitative**: It represents numbers (includes both numerical and decimals)
  a) *Ration*: It has true zero value that means nothing. Example in length there is no meaning for zero inches and zero feet. Here zero means no length or zero weight means no weight.

  b) *Interval:* It has value for zero and it is not giving the meaning as nothing. Example in Temperature scale (Fahrenheit/Centigrade) if the value is zero means not indicating as nothing but indicates as cold.