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

## A.Data Analysis:

Data analysis is a process of reducing data to a story i.e a meaningful information and interpret it to derive insights.Data analysis is not just a single step but a set of processes

Five main steps of analysing a data :

1.Collection of Data

2.Organizing the Data

3.Presenting the Data

4.Analysis of the Data

5.Interpretation of the Data

## Machine Learning:

Machine learning is a method of data analysis that automates analytical model building.It is a branch of artificial intelligence based on the idea that systems can learn from data ,identify patterns and make decisions with minimal human intervention.

# Q2.What is Big Data?

A.Big data prefers to copious or large amounts of data.The data which is too large to analyize by traditional tools

We use number of data analising tools to gather and transform data into meaningful insights

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

A.The four main things to know before studying data analysis according to me are :

\* One should always remember that data analysis require creative and analytical thinking .

\* One should have great zeal to learn and explore things .

\* You have to like working with numbers as it includes Statistics and Probability.

\* Communication and Presentation skills are as important as math.

# Q4.Most common characteristics used in descriptive statistics ?

A.descriptive statistics summarizes or describes the characteristics of a data set.

The most common characteristics used are :

\* Range

\* Variance

\* Standard Deviation



\* Skew

# 5.What is quantative data and qualitative data ?

## A.Data is divided into two types .

\* Qualitative data :Qualitative data are data about categorial variables .Descriptive ,relating to words and language .

\* Quantative data :Quantative data are data about numeric variables.Countable or measurable,related to numbers.

## Qualitative data is further divided into:

* Nominal data and ordinal data

Nominal data examples

* Gender
* Hair Colour
* Ethnicity

Ordinal data examples

* First ,Second and Third
* Grades
* Economic status

## Quantative data is further divided into :

* Discrete data and Continous data

Discrete data examples

* The Number of people
* The number of home runs in a basket ball tournament

Continuous data examples

* Height
* Speed
* Accuracy