Project Theory answers

Q1 Types of Data Numerical & categorical

A) Numerical Data is ① Discrete and ② Continuous Data

→ Discrete means the countable number not in Decimal for eg:- age, Mobile number

→ Continuous means the number which can be in Decimal for eg:- Temperature, Score

→ Categorical Data is Nominal and Ordinal

→ Nominal Names/tags like male/female

→ Ordinal means ordered category Low/medium/High/ Ratings

- Quartiles

- Quartiles means Q1, Q2, Q3 where Q1 is 25% of Data, Q2 is 50% of Data and Q3 is next 25% of Data. Q2 is called Median data as well

- five number summary

- minimum
- Q1
- Q2 Median
- Q3
- maximum

- Skewness

→ This Describes the asymmetry of a data distribution around its mean

- Kurtosis

- The means the Curve / Tail of data is ~~[illegible]~~ lightly more heavy and lightly from normal Distribution

Variance:- In the we can find how far each value is from mean

Standard deviation:- It shows the typical deviation from the mean in original units

Q-5 • Gaussian Distribution

→ It is a bell shape curved normal distribution graph which shows us How far each data lies from mean

• Lognormal Distribution

→ when the Data is right skewed and values are not negative is called Log

• Percentiles

• Percentile Show us the which data is in which position and How much Data falls at the point

$P = (\frac{\text{count}}{\text{total}}) 100$

Q-1 Types of Statistics: Descriptive and Inferential

-> Descriptive Data To Summarize Data Using measures of central tending and measure of Dispersion, Shape of Distribution and graphs

-> In Inferential we can Define Hypothesis Testing Based of p values, A/B Testing, Null & Alternative Hypotheses

Q-2 What is Descriptive Statistics

-> Descriptive statistics means from a large Number of data (Population) we can take a Simple group of data and the we can Summarize and visualize Data

On the central Tendency
- mean
- median
- mode

we can use

Measure of Dispersion
- Range
- Variance
- Standard Deviation

Graphs like
- Bar graph, pie chart, line chat etc

Shape of Distribution like
- Skewness
- kurtosis

we can see.

Difference between

-> mean :- In mean we can take the Average of Data or a sample data

Median :- in median we can find the middle value of data

mode :- in mode we can find most repeated values

Range :- we can see How much data is spread