Theory question – weekly test

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Q. Write down 10 differences between Descriptive statistics and inferential Statistics.

Sr. No.	Descriptive Statistics	Inferential Statistics
1.	Summarizes and describes the main features of a dataset.	Makes inferences about a population based on a sample.
2.	It involves measures like mean, median, mode, etc.	It involves hypothesis testing, confidence intervals, regression, etc.
3.	It uses graphs, charts, and summary statistics.	It uses statistical models and tests to infer relationships and make predictions.
4.	It doesn't require assumptions about the data distribution.	It mainly relies on assumptions about data distribution and sample size.
5.	It applies to the entire dataset or sample data.	It uses sample data to make conclusions about a population.
6.	Provides a summary of the dataset.	Provides conclusions or predictions about a population.
7.	Mostly used for data exploration and presentation.	Used for testing hypotheses and making predictions about unseen data.
8.	Works directly with raw data (without preprocessing) to provide a summary.	Requires data to be processed and analyzed to make predictions about the population.
9.	It helps in understanding and describing characteristics of the dataset.	It aids in decision-making by providing evidence to support or deny hypotheses.
10.	Examples: Reporting average salary or distribution of heights.	Example: Testing if sample income differs from a known population average.