Inferential Statistics

- Inferential statistics is a branch of statistics that makes inferences/predictions about a population based on a sample from that population.
- Key Concepts:
- → **Population and Sample**: Population is the entire group of observations while sample is a subset of that population.
- → **Sampling Methods**: There are different types of sampling methods such as Random sampling, stratified sampling, cluster sampling etc.
- → Regression Analysis : Regression is a statistical method used to predict continuous values.
- → **Hypothesis Testing**: There are many types of hypothesis testing such as null hypothesis, Type 1 error, Type 2 error, Alternate Hypothesis etc
- → Significance Levels : The thresholds for rejecting null hypothesis.