Glossary

1. **Analysis of Variance (ANOVA)**
   A statistical technique which helps in making inference whether three or more samples might come from populations having the same mean; specifically, whether the differences among the samples might be caused by chance variation.

2. **Associative Statistics**
   Associative statistics seeks to identify meaningful interrelationships between or among data.

3. **Descriptive Statistics**
   Descriptive statistics is the discipline of quantitatively describing the main features of a collection of data. Descriptive statistics aims to summarize a sample, rather than use the data to learn about the population that the sample of data is thought to represent.

4. **Estimate**
   An estimate is a specific observed value of a statistic.

5. **Inferential Statistics**
   This is the process of drawing information from sampled observations of a population and making conclusions about the population.

6. **Interval Scale**
   An interval scale is a measurement scale in which a certain distance along the scale means the same thing no matter where on the scale you are, but where "0" on the scale does not represent the absence of the thing being measured. Fahrenheit and Celsius temperature scales are examples.

7. **Mean**
   For a data set, the arithmetic mean is equal to the sum of the values divided by the number of values. The arithmetic mean of a set of numbers x_1, x_2, ..., x_n is typically denoted by x bar. If the data set were based on a series of observations obtained by sampling from a statistical population, the arithmetic mean is termed the sample mean x bar to distinguish it from the population mean mu or mu x

8. **Median**
   The median is that value of the variate which divides the total frequency into two halves.

9. **Mode**
   The mode is the number that appears most often in a set of numbers. The mode is a way of expressing, in a single number, important information about a random variable or a population. The mode of a continuous probability distribution is the value x at which its probability density function has its maximum value.

10. **Nominal scale**
    The nominal scale is a type of measurement scale. Values assigned to variables represent a descriptive category, but have no inherent numerical value with respect to magnitude. Gender is an example of a variable that is measured on a nominal scale. Individuals may be classified as "male" or "female", but neither value represents more or less "gender" than the other.

11. **Non parametric tests**
    In statistical inference procedures (hypothesis tests and confidence intervals), nonparametric procedures are those that are relatively free of assumptions about population parameters.

12. **Ordinal scale**
    The ordinal scale is a type of measurement scale. Each value on the ordinal scale has a unique meaning, and it has an ordered relationship to every other value on the scale.

13. **Parametric tests**
    In statistical inference procedures (hypothesis tests and confidence intervals), parametric procedures are those that incorporate assumptions about population parameters.

14. **Posterior probability**
    In Bayesian statistics, the posterior probability of a random event or an uncertain proposition is the conditional probability that is assigned after the relevant evidence is taken into account. Similarly, the posterior probability distribution is the distribution of an unknown quantity, treated as a random variable, conditional on the evidence obtained from an experiment or survey.

15. **Ratio scale**
    The ratio scale of measurement is a type of measurement scale. It is characterized by equal intervals between scale units and an absolute zero. The weight of an object would be an example of a ratio scale. Units along the weight scale are equal to one another, and there is an absolute zero.