Statistics Worksheet-1

- 1. A. True
- 2. C. Central limit theorem
- 3. B. Modeling bounded count data
- 4. D. All of the above mentioned
- 5. C. Poisson
- 6. b. False
- 7. b. Hypothesis
- 8. a. 0
- 9. c. Outliers can't confirm to regression relationship
- 10. Normal distribution is the most common distribution function for the independent and randomly generated variables. The Graph of normal distribution is characterized by two parameters :
 - a. mean, which is the maximum of the graph and about which the graph is always symmetric
 - b. the standard deviation, which determines the amount of dispersion away from the mean
- 11. There are multiple ways to handle missing data:
- a. if the features are **less important** and **more in number** we can simply delete the entire row with missing values by using '**dropna**' attribute
- b. if the features are important, **quantitative** and we can't afford to delete them we can fill the missing values with the **mean** of the rest of the values .
- c. if the features are important, **qualitative** and we can't afford to delete them we'll fill them with the most frequent value observed in rest of the cells by using **mode** method

Different imputation techniques depending on the type of missing data are:

- a. Mean
- b. Median
- c. Mode
- 12. A/B testing is a user experience research methodology. A/B tests consist of a randomized experiment that usually involves two variants, although te concept can be also extended to multiple variants of the same variable.
- 13. Mean imputation of missing data is acceptable only in the cases where data to be filled is quantitative data, if it is qualitative data we can't use mean imputation.
- 14. In Statistics ,Linear Regression is a linear approach to model the relationship between dependent and independent variable.
 - 15. Branches of statistics are:
 - a. descriptive statistics
 - b. Inferential statistics