Worksheet 3 - Statistcs
Solutions

1. B) Total Variation = Residual Variation + Regression Variation

2. C) Binomial

3. A) 2

4. A) Type 1 Error

5. C) Level of confidence

6. C) Increases

7. B) Hypothesis Testing

8. D) All of the mentioned

9. A) 0

10. Bayes theoram is a mathematical formula used to determine the likelihood of an event based on the prior outcome on the similar condition.

11. Z-score also referred to as a standard score is the unit of measurement to identify how far(standard deviation) a data-point is located from the mean. It is believed that 99% of the normally distributed data lies between z score of -3 to +3

12. T test is one of the statistical test used to compare the means of two groups of data and determine if there is any significant effect on population mean

13. A percentile is the unit of measurement to determine where a values falls in a given percentage of observations for ex - if data-point is at 40percentile it means that 40% of the data lies below that particular data point

14. Anova stands for Analysis of variance, is a statistical test used to determine if there is any statistical difference in the mean of groups of independent data. Only difference between t-test and anova is t-test used for 2 groups of data however Anova used for more than 2 groups.

15. Anova studies the level of variance within the group. If helps to identify which independent variable is different from the other and it also helps us to identify the factor affecting this change