1. D) All of the mentioned
2. A) Discrete
3. A) Probability Density Function
4. B) Median
5. C) Empirical Mean
6. B) standard Deviation
7. C) 0 and 1
8. B) BootStrap
9. B) Summarized
10. Box plot and histograms are both used for data visualization but the basic difference between these two is that; box plot is basically used for detecting outliers whereas histograms are used for detecting the distribution or skewness of data.
11. To select the metrics we need to first prioritize our goals as the key point is to select metrics that clearly indicate where we are now in relation to our desired goals.
12. To assess statistical significance we first need to use hypothesis testing. The null and alternate hypothesis should be tested first. Then we need to find the p-value which is the test findings if the Ho is true. Then we need to provide the threshold and reject the Ho if p-value is smaller than the threshold value.
13. Data related to distribution of money or value will not have a Gaussian distribution like distributions of income, distribution of house prices, distributions of bet placed on a sporting event etc.
14. Income is the classic example where median is considered as best practice as mean tends to overestimate where most household income falls.
15. The likelihood is the probability that a particular outcome is observed when the true value of parameter is, equivalent to the probability mass.