

R Course Module by Priyanka Dutta (2 Classes/ Week)

1. Installation of R
2. Vector
3. Class of Vector
4. Data Frame,String
5. Property view of the above
6. Rows , Column of a dataframe
7. Sign Operator
8. AND , OR Condition
9. Ascending, Descending & Multivariate sort
10. IF ELSE Condition
11. Row bind, Column Bind function
12. Inner, Right, left, outer Merge
13. Descriptive statistics function(Mean, Median, Max, min, Exp. Etc.)
14. Duplicate values treatment, concatenation
15. Pivot in R
16. SQL in R, Descriptive stats in SQL, Else If statement in SQL
17. Filtering data
18. Missing value Treatment
19. Changing names of the columns, Cut function
20. Function in R
21. LUBRIDATE

Statistics

22. • Central Limit Theorem
23. • Measure of Dispersion
24. • Quartiles, Inter Quartile Ranges
25. • Variance
26. • Standard Deviation
27. • Z Score
28. • Normal Distribution
29. • Pearson Correlation Coefficient- R
30. • R Square
31. • Adjust R2
32. • Outliers Detection and Removal

Visualization

33. • Scatter Plot
34. • Line Plot
35. • Corealation Matrix
36. • Box Plot
37. • Bar Chart
38. • Histogram

Advance Level

39. Linear Regression (Statistical Concept + Code)
40. Logistic Regression (Statistical Concept + Code)
41. Forecasting (ARIMA) (Statistical Concept + Code)
42. Decision tree (Statistical Concept + Code)
43. K-Means Clustering (Statistical Concept + Code)