# **R Programming Language**

### **R** Introduction

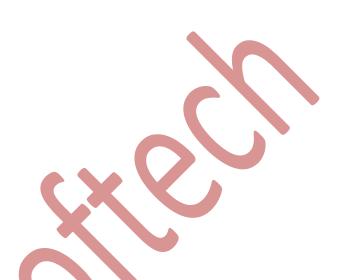
- R Reserved Words
- Variables & Constants
- R Operators
- Operator Precedence

## **Decision and Loop**

- R Programming if...else
- R ifelse() Function
- R Programming for loop
- R while Loop
- R break & next
- R repeat Loop

### **R Functions**

- R Functions
- Function Return Value
- Environment & Scope
- R Recursive Function
- R Infix Operator
- R Switch Function



### **R Data Structures**

- R Vectors
- R Matrix
- List in R programming
- R Data Frame
- R Factor

## R Object & Class

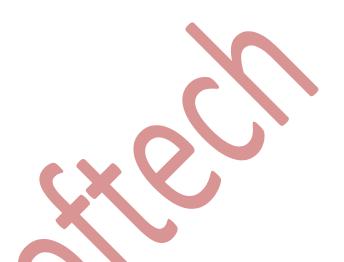
- Object and Class
- R S3 Class
- R S4 Class
- R Reference Class
- R Inheritance

## **Graphs & Charts**

- R Bar Plot
- R Histogram
- R Pie Chart
- R Box Plot
- R Strip Chart
- Coloring Plot

## More on Plotting in R

- Plot Function
- Subplot
- Saving Plot
- 3D Plot



## **Explore Data: Part I**

- Explore Data Introduction
- Remove Missing and Invalid Values (NA and NaN)
- Merging Data
- Subset Data
- Sort Data
- Fixing Date and Time Issues

### **Explore Data: Part II**

- Introduction to dplyr
- Install dplyr
- Select Data Using dplyr
- Filter Data Using dplyr
- Arrange & Rename Data
- Merge Data Using dplyr
- Mutate Data Using dplyr
- Mutate Data Using dplyr
- Group Data Using dplyr
- dplyr Pipeline Operator

### Visualize Data

- Introduction to Visualizing Data
- Graphs
- Scatter Plot
- Box Plot
- Histogram
- Using GGPlot to Visualize Data

