

Introduction to R

- What is R?
- Why R?
- Installing R
- R environment
- How to get help in R
- R Studio Overview

Understanding R data structure

- Variables in R
- Scalars
- Vectors
- Matrices
- List
- Data frames
- Cbind,Rbind, attach and detach functions in R
- Factors
- Getting a subset of Data
- Missing values
- Converting between vector types

Importing data

- Reading Tabular Data files

- Reading CSV files
- Importing data from excel
- Loading and storing data with clipboard
- Accessing database
- Saving in R data
- Loading R data objects
- Writing data to file
- Writing text and output from analyses to file

Manipulating Data

- Selecting rows/observations
- Rounding Number
- Creating string from variable
- Search and Replace a string or Number
- Selecting columns/fields
- Merging data
- Relabeling the column names
- Data sorting
- Data aggregation
- Finding and removing duplicate records

Using functions in R

- Apply Function Family
- Commonly used Mathematical Functions