Coursera: Data Science: Foundations using R Specialization

Course 2: R Programming

Objects classes: character, numeric, integer, complex, logical

Vector [ ], list [[ ]], 0/0 → NaN

- c(0.5, 0.6) numeric, c(T, F) logical,

  c("a", "b", "c") character, 9:29 integer,

  c(1+0i, 2+4i) complex

- is.na() used to test objects if they are NA.

  is.nan() is used to test for NaN

// NaN value is also NA but the converse is not true!

- gzfile(" ") open a connection to a file compressed with gzip

  bzfile(" ") open a connection to a file compressed bzip2

- Removing NAs

  → is.na(), → complete.cases() ,

Control Structures

if, else → testing condition

for → execute a loop a fixed number of times

while → excute a loop while a condition is true

repeat → excute an infinite loop

break → break the execution of a loop

* next → skip an interation of a loop

* return → exit a function

⑩ Dates & Times in R

* as.Date(" ") , as.POSIXlt()

⑪ apply family

→ they Return differently.

/// lapply , sapply

lapply → loop over a list

sapply → similar to lapply, but try to simplify the result

/// apply : apply a function over the margins of an array

/// tapply: apply a function over subsets of a vector

/// mapply: multivariate version of lapply.

⑬ split() → splits obj. into groups determined by a factor or list of factors.

⑭ System.time() → user time (time charged to CPU) vs. elapsed time ("wall clock" time)

* parallel pkg