Introduction to R and RStudio Demos

RStudio: Organize Working Directory

*Add **data_raw** folder using command:*

dir.create("data_raw")

RStudio: Check Working Directory

Command to get new working directory path:

getwd()

Console Pane

Demo of how to cancel incomplete command in console pane:

sin(1) *(press enter)*

sin(1 *(press enter, then press ESC key)*

Script Editor

Enter script in source pane:

sin(1) # trigonometry function

cos(1) # trigonometry function

log(1) # natural logarithm

Creating Objects in R and Assigning Value

Enter in console pane:

weight_kg <- 55

Assignment

To display object value:

(weight_kg<-55)

weight_kg

Doing arithmetic with an object:

2.2*weight_kg

Assigning a new value to object:

weight_kg<-57.5

2.2*weight_kg

weight_lb <- 2.2 * weight_kg

weight_kg<-100

weight_lb

Comments

Enter script in source pane:

sum(1,2,3) #sum of numbers

Functions and their Arguments (1)

Example of a function, enter in console:

a=4

b<-sqrt(a)

b

Functions and their Arguments (2)

A function that can take multiple arguments, round():

round(3.14159)

To find help documentation for a function, enter in console:

?round

Enter in console:

round(3.14159, digits = 2)

RStudio Help Interface

If you need help with a specific function, let's say barplot(), you can type in the console:

?barplot

If you want to find a function to do a particular task, type in the console:

??plot

Getting Help from the R User Community (1)

Save R object to file:

saveRDS(weight_kg, file="~[file path]")

With example file path:

saveRDS(weight_kg, file="~/R/Test/Test/weight_kg.rds")

Enter in console to get session info:

sessionInfo()