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Introduction to R and RStudio Demos

**RStudio: Organize Working Directory**

*Add* ***data\_raw*** *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]")

*Enter in console to get session info:*

sessionInfo()