Assignment

<- : Basic Assignment
= : Basic Assignment
<<- : Global Assignment

Mathematical Operations

+ : Addition
− : Subtraction
∗ : Multiplication
\ : Division
∗∗ : Exponentiation
sqrt() : Square Root
%% : Modulo
round() : Rounds an object (to a specified decimal)

Logical Operations

== : Is equal to
! = : Not equal to
! : Not
< : Less than
≤ : Less than or equal to
> : Greater than
≥ : Greater than or equal to
& : AND
| : OR

Object Manipulation

c() : Create vector
: : Create sequence vector
[ ] : Subsetting/slicing
rep() : Repeat object
names() : Return object names
dimnames() : Returns object dimensions' names
list() : Create List
$: List extraction
[[ ]] : List extraction

Object Class

class() : Return object class
is.character() : Is a character
is.numeric() : Is a number
is.integer() : Is an integer
is.logical() : Is a logical
is.na() : Is an NA
is.null() : Is a NULL

Object Coercion

as.character() : Coerce to character
as.numeric() : Coerce to numeric
as.integer() : Coerce to integer
as.logical() : Coerce to logical
unlist() : Unlist a list object
as.vector() : Coerce to vector

Programmers' Workhorses

if() : Conditional statement
for() : For loop
while() : While loop
break : Break out of loop
next : Skip to next iteration of loop
function() : Create function
return() : Return function output

Other Useful "Primitives"

sum() : Returns the sum of an object
max() : Returns the highest number of an object
min() : Returns the lowest number of an object
ceiling() : Rounds up an object
floor() : Rounds down an object
abs(): Returns absolute values of an object
length() : Returns the length of an object
dim() : Returns the dimensions of an object
all() : Checks if all (logical) inputs are TRUE
seq() : Returns a specified sequence of numbers
exp() : Exponential of Euler's e
log() : Logarithm (default base is Euler's e)

Other Allowed Functions

%in% : Is left subset of right
which() : Returns index positions of TRUE
sort() : Returns sorted vector
order() : Returns index positions of sorted vector
print() : Prints input on console
paste() : Concatenates inputs into character string
matrix() : Create matrix object
data.frame() : Create data.frame object
as.data.frame() : Coerce object to data.frame
nrow() : Returns number of rows of data.frame
ncol() : Returns number of columns of data.frame
rownames() : Returns row names of data.frame
colnames() : Returns column names of data.frame
str() : Returns structure of object
summary() : Returns summary of object
unique(): Returns unique elements of object