Cheatography

R Basic Cheat Sheet

by Dipakk (Dipakk) via cheatography.com/67199/cs/16837/

Util Functions

getwd()	gets the working directory
setwd("C:/file/p-ath")	sets the working directory
data = read.csv(fil-e.choose())	opens file explorer to get data
ls()	lists the variables
str(var)	structure of the variable
rm(var)	removes the variable
help.start()	opens help
install.packages("p-ackage name")	installs the package
library("package name")	makes the contents available to use
detach("package name")	detaches the package

Strings

toString(x)	helper function to produce a single character string
toupper()/to-lower()	converts text to upper/-lower case
substring(ch-r,n,n)	retrieve or replaces the substring of the charachter
paste (…, sep = " ", collapse = NULL)	Concatenate vectors after converting to character

Arrays and Matrix

1D = array(1:24)	1 dimensional array
2D = array(1:24, dim = c(6,4))	2 dimensional array

Arrays and Matrix (cont)

3D = array(1:24, dim = c(4,3,2))	3 dimensional array
mat = matrix(1:12, nrow=4, ncol=3)	matrix
cbind(mat1,mat2)	column bind
rbind(mat1,mat2)	row bind

Vector

num = c(1,2,3,4,5,6)	numeric vector
chr = c("aaa","bbb")	character vector
log = c(TRUE,TR-UE,FALSE)	logical vector
mean(vec)	mean
sd(vec)	standard deviation
var(vec)	variance
range(vec)	range
which.min(vec)/whi-ch.max(vec)	position of the min/max value
rep(1:5,times=3)	replicate elements of vector

DataFrame

df = data.frame(subjectID=-1:5,gender=c("M","-F","M","M","F"),score=c(8,3,-6,5,5))	dataframe
view(df)	opens editor
head(df)/tail(df)	displays top/bottom n rows
summary(df)	returns descriptive statistics of data

Descriptive Statistics

rowMeans(data[])	row mean
rowSums(data[])	row sum
colMeans(data[])	column mean
colSums(data[])	column sum

Loops

for (variable in sequence){ Do something }	for loop
while (condition){ Do something }	while loop
if (condition){ Do something } else { Do something different }	ifelse statement

Hypothesis

t.test(data)	1 sample t test
t.test(data1,data2)	2 sample t test
t.test(pre,post,paire-d=TRUE)	paired sample t test
wilcox.test(data)	Wilcox test
cor.test(data1,data2)	correlation test
chisq.test(data)	Chi square test
shapiro.test(data)	Shapiro test
aov()	ANOVA

Visualization

qplot(data, line=T-RUE,...)	produces quanti-le-quantile plot
ggplot(data = NULL, mapping = aes(), ...)	initializes a ggplot object
geom_bar()	bar graph
coord_flip()	flip x and y coordinates
facet_grid()	lay out panels in a grid
geom_density	density plot
geom_hist	histogram
geom_point	scatter plots

By **Dipakk** (Dipakk)
cheatography.com/dipakk/

Published 29th August, 2018.
Last updated 29th August, 2018.

Probability

rbinom(n, size, prob)	Binomial distribution
rpois(n,size)	Poisson distribution
runif(n, min = 0, max = 1)	Uniform distribution
rnorm(n,mean,sd)	Normal distribution
rexp(n)	Exponential distribution

Statistics

summary(lm(y ~ x1 + x2 + x3, data=mydata))	multiple regression
summary(glm(y ~ x1 + x2 + x3, family="", data=mydata))	classification
cluster = kmeans(data)	kmeans cluster analysis

By **Dipakk** (Dipakk)
cheatography.com/dipakk/

Published 29th August, 2018.
Last updated 29th August, 2018.