

Package ‘lin’

November 15, 2020

Type Package

Title Jennifer Lin's Collection of Functions

Version 0.1.0

URL <https://github.com/lin-jennifer/lin>

Description These are functions that I use often in my work. May not be useful for general use but may be necessary to install if you are collaborating with me or interacting my R code.

License MIT

Encoding UTF-8

LazyData true

RoxygenNote 7.1.1

Suggests testthat

Imports ggplot2

Depends R (>= 2.10)

R topics documented:

ggLin	1
Operators	2
ReverseCode	3
SummaryStats	4
Index	6

ggLin	<i>Jennifer's ggplot2 Theme</i>
-------	---------------------------------

Description

I find that I am copying and psting the same long command for my favorite theme settings, so I figure I'd write that into this package to simplify the process.

Usage

```
theme_lin(...)
```

Arguments

... Passed to `[ggplot2::theme()]`

Details

The specifications of this theme is as follows:

```
theme_classic()+
theme(
  plot.title = element_text(hjust = 0.5, size = 24, colour="black"),
  plot.subtitle = element_text(hjust = 0.5, size = 18, colour="black"),
  legend.title = element_text(hjust = 0.5, size = 16, colour="black"),
  plot.caption = element_text(size = 12, colour="black"),
  axis.title = element_text(size = 16, colour="black"),
  axis.text.x = element_text(size = 14, colour="black"),
  axis.text.y = element_text(size = 14, colour="black"),
  legend.title.align = 0.5)
```

Examples

```
library(ggplot2)
ggplot(mtcars, aes(y=mpg, x=disp, color=cyl)) +
  geom_point() +
  theme_linn()
```

Operators

Operators

Description

Some useful operators outside of the standard ones in R.

Usage

`x %nin% y`

`x %NIN% y`

`x %IN% y`

Arguments

`x` a vector

`y` a vector to match

Value

logical vecotor of items in x not in y

logical vecotor of items in x not in y, omits NAs

logical vecotor of items in x in y, omits NAs

Examples

```

y = c(3, 4, 5, NA)

# Not In -- and omits NA
y %nin% 3    # FALSE TRUE TRUE TRUE
y %NIN% 3    # FALSE TRUE TRUE NA

# IN -- Omits NA
y %in% 3     # TRUE FALSE FALSE FALSE
y %IN% 3     # TRUE FALSE FALSE NA

```

ReverseCode

*Reverse Coding Variables***Description**

I never actually know how to do them, so I google this every time. Perhaps its time to settle this once and for all.

Usage

```
reverse_code(var)
```

Arguments

var a numeric variable

Details

Thanks goes to James Martherus.

Source

<https://github.com/jamesmartherus/martherus>

Examples

```

x1 <- c(1, 2, 3, 4, NA, 5)
reverse_code(x1)    #c(5, 4, 3, 2, NA, 1)

x2 <- c(0, 1, 2, NA, 4, 7)
reverse_code(x2)    #c(7, 6, 5, NA, 3, 0)

```

SummaryStats*Summary Statistics Calculations*

Description

Common functions for calculating central tendencies but with NA parameters set to TRUE unlike the defaults.

Usage

```
modeNA(x)
meanNA(x)
wMeanNA(x, w)
medianNA(x)
minNA(x)
maxNA(x)
rangeNA(x)
sdNA(x)
sumNA(x)
varNA(x)
```

Arguments

x	a vector
w	a weight variable

Details

Credits to John Bullock for the inspiration. Some of this is from his Bullock package, but others are my own.

Source

<https://github.com/jbullock35/Bullock>

Examples

```
x <- c(1, 1, 2, 3, 5, 8, 13, 21, NA, NA, NA)
w <- c(0, 0, 0, 1, 1, 2, 2, 2, 0, 0, 0)

# Mode
modeNA(x)      # 1
```

```
# Mean and Weighted Mean
meanNA(x)      # 6.75
wMeanNA(x, w)  # 11.5

# Median
medianNA(x)    # 4

# Range
minNA(x)       # 1
maxNA(x)       # 21
rangeNA(x)     # c(1, 21)

# Sum
sumNA(x)       # 54

# Variance and Standard Deviation
varNA(x)
sdNA(x)
```

Index

`%IN%` (Operators), [2](#)
`%NIN%` (Operators), [2](#)
`%nin%` (Operators), [2](#)

`ggLin`, [1](#)

`maxNA` (SummaryStats), [4](#)
`meanNA` (SummaryStats), [4](#)
`medianNA` (SummaryStats), [4](#)
`minNA` (SummaryStats), [4](#)
`modeNA` (SummaryStats), [4](#)

Operators, [2](#)

`rangeNA` (SummaryStats), [4](#)
`reverse_code` (ReverseCode), [3](#)
ReverseCode, [3](#)

`sdNA` (SummaryStats), [4](#)
SummaryStats, [4](#)
`sumNA` (SummaryStats), [4](#)

`theme_lin` (ggLin), [1](#)

`varNA` (SummaryStats), [4](#)

`wMeanNA` (SummaryStats), [4](#)