

Package ‘radiant.data’

September 2, 2016

Title Business Analytics using R and Shiny

Version 0.5.22

Date 2016-9-2

Description A platform-independent browser-based interface for business analytics in R, based on the Shiny package.

Depends R (>= 3.3.0),
magrittr (>= 1.5),
ggplot2 (>= 2.0.0),
lubridate (>= 1.5.0),
tidyr (>= 0.6),
dplyr (>= 0.5)

Imports tibble (>= 1.1),
broom (>= 0.4.1),
car (>= 2.1),
gridExtra (>= 2.0.0),
knitr (>= 1.13),
rmarkdown (>= 0.9.5),
markdown (>= 0.7.7),
pryr (>= 0.1.2),
shiny (>= 0.13.2),
jsonlite (>= 0.9.17),
shinyAce (>= 0.2.1),
psych (>= 1.5.8),
DT (>= 0.2),
readr (>= 1.0.0),
scales (>= 0.4.0),
curl (>= 1.1.0),
rstudioapi (>= 0.5),
import (>= 1.0.0),
base64enc,
methods

Suggests testthat (>= 1.0.0),
covr (>= 1.2.0)

URL <https://github.com/radiant-rstats/radiant.data>, <https://radiant-rstats.github.io/docs>

BugReports <https://github.com/radiant-rstats/radiant.data/issues>

License AGPL-3 | file LICENSE

LazyData true

RoxygenNote 5.0.1

R topics documented:

add_class	4
as_character	5
as_data_frame	5
as_distance	5
as_dmy	6
as_dmy_hm	6
as_dmy_hms	7
as_duration	7
as_factor	8
as_hm	8
as_hms	9
as_integer	9
as_mdy	10
as_mdy_hm	11
as_mdy_hms	11
as_numeric	12
as_tibble	12
as_ymd	12
as_ymd_hm	13
as_ymd_hms	13
avengers	14
center	14
changedata	15
ci_label	15
ci_perc	16
combinedata	16
copy_all	17
copy_from	18
cv	19
data_frame	19
describe	19
diamonds	20
does_vary	20
empty_level	21
explore	21
factorizer	22
filterdata	23
find_dropbox	23
flip	24
formatdf	24
formatnr	25
getclass	26
getdata	26
getsummary	27
glance	27
indexr	27

install_webshot	28
inverse	28
is_empty	28
is_not	29
is_string	29
items	30
kurtosi	30
level_list	31
ln	31
loadcsv	32
loadcsv_url	32
loadr	33
loadrda_url	33
make_dt	34
make_expl	35
make_funs	35
make_train	36
max_rm	36
mean_rm	37
median_rm	37
min_rm	38
mode_rm	38
mutate_each	39
normalize	39
n_missing	40
p05	40
p10	41
p25	41
p75	42
p90	42
p95	43
pivotr	43
plot.character	44
plot.pivotr	44
print.gtable	45
publishers	46
radiant.data	46
radiant.data-deprecated	47
render	47
render.character	48
render.datatables	48
rounddf	48
rownames_to_column	49
saver	49
sdp_rm	50
sd_rm	50
se	51
Search	51
set_attr	52
show_duplicated	52
sig_stars	53
skew	53

square	54
ssh	54
sshhr	55
standardize	55
store	56
store.data.frame	56
store.explore	57
summary.explore	57
summary.pivotr	58
sum_rm	59
superheroes	59
table2data	60
tibble	60
tidy	60
titanic	61
varp_rm	61
var_rm	62
viewdata	62
visualize	63
weighted.sd	64
which.pmax	65
which.pmin	65
xtile	66

Index	67
--------------	-----------

add_class	<i>Convenience function to add a class</i>
-----------	--

Description

Convenience function to add a class

Usage

```
add_class(x, cl)
```

Arguments

x	Object
cl	Vector of class labels to add

Examples

```
foo <- "some text" %>% add_class("text")
foo <- "some text" %>% add_class(c("text", "another class"))
```

as_character	<i>Wrapper for as.character</i>
--------------	---------------------------------

Description

Wrapper for as.character

Usage

```
as_character(x)
```

Arguments

x Input vector

as_data_frame	<i>Exporting as_data_frame</i>
---------------	--------------------------------

Description

Exporting as_data_frame

as_distance	<i>Distance in kilometers or miles between two locations based on lat-long Function based on http://www.movable-type.co.uk/scripts/latlong.html. Uses the haversine formula</i>
-------------	--

Description

Distance in kilometers or miles between two locations based on lat-long Function based on <http://www.movable-type.co.uk/scripts/latlong.html>. Uses the haversine formula

Usage

```
as_distance(lat1, long1, lat2, long2, unit = "km", R = c(km = 6371, miles = 3959)[[unit]])
```

Arguments

lat1	Latitude of location 1
long1	Longitude of location 1
lat2	Latitude of location 2
long2	Longitude of location 2
unit	Measure kilometers ("km", default) or miles ("miles")
R	Radius of the earth

Value

Distance bewteen two points

Examples

```
as_distance(32.8245525,-117.0951632, 40.7033127,-73.979681, unit = "km")
as_distance(32.8245525,-117.0951632, 40.7033127,-73.979681, unit = "miles")
```

as_dmy	<i>Convert input in day-month-year format to date</i>
--------	---

Description

Convert input in day-month-year format to date

Usage

```
as_dmy(x)
```

Arguments

x Input variable

Value

Date variable of class Date

Examples

```
as_dmy("1-2-2014")
```

as_dmy_hm	<i>Convert input in day-month-year-hour-minute format to date-time</i>
-----------	--

Description

Convert input in day-month-year-hour-minute format to date-time

Usage

```
as_dmy_hm(x)
```

Arguments

x Input variable

Value

Date-time variable of class Date

Examples

```
as_mdy_hm("1-1-2014 12:15")
```

as_dmy_hms	<i>Convert input in day-month-year-hour-minute-second format to date-time</i>
------------	---

Description

Convert input in day-month-year-hour-minute-second format to date-time

Usage

```
as_dmy_hms(x)
```

Arguments

x	Input variable
---	----------------

Value

Date-time variable of class Date

Examples

```
as_mdy_hms("1-1-2014 12:15:01")
```

as_duration	<i>Wrapper for lubridate's as.duration function. Result converted to numeric</i>
-------------	--

Description

Wrapper for lubridate's as.duration function. Result converted to numeric

Usage

```
as_duration(x)
```

Arguments

x	Time difference
---	-----------------

as_factor	<i>Wrapper for as.factor</i>
-----------	------------------------------

Description

Wrapper for as.factor

Usage

```
as_factor(x)
```

Arguments

x	Input vector
---	--------------

as_hm	<i>Convert input in hour-minute format to time</i>
-------	--

Description

Convert input in hour-minute format to time

Usage

```
as_hm(x)
```

Arguments

x	Input variable
---	----------------

Value

Time variable of class Period

Examples

```
as_hm("12:45")  
## Not run:  
as_hm("12:45") %>% minute  
  
## End(Not run)
```

as_hms*Convert input in hour-minute-second format to time*

Description

Convert input in hour-minute-second format to time

Usage

```
as_hms(x)
```

Arguments

x	Input variable
---	----------------

Value

Time variable of class Period

Examples

```
as_hms("12:45:00")
## Not run:
as_hms("12:45:00") %>% hour
as_hms("12:45:00") %>% second

## End(Not run)
```

as_integer*Convert variable to integer avoiding potential issues with factors*

Description

Convert variable to integer avoiding potential issues with factors

Usage

```
as_integer(x)
```

Arguments

x	Input variable
---	----------------

Value

Integer

Examples

```
as_integer(rnorm(10))
as_integer(letters)
as_integer(5:10 %>% as.factor)
as.integer(5:10 %>% as.factor)
```

as_mdy

*Convert input in month-day-year format to date***Description**

Convert input in month-day-year format to date

Usage

```
as_mdy(x)
```

Arguments

x Input variable

Details

Use as.character if x is a factor

Value

Date variable of class Date

Examples

```
as_mdy("2-1-2014")
## Not run:
as_mdy("2-1-2014") %>% month(label = TRUE)
as_mdy("2-1-2014") %>% week
as_mdy("2-1-2014") %>% wday(label = TRUE)

## End(Not run)
```

as_mdy_hm	<i>Convert input in month-day-year-hour-minute format to date-time</i>
-----------	--

Description

Convert input in month-day-year-hour-minute format to date-time

Usage

```
as_mdy_hm(x)
```

Arguments

x	Input variable
---	----------------

Value

Date-time variable of class Date

Examples

```
as_mdy_hm("1-1-2014 12:15")
```

as_mdy_hms	<i>Convert input in month-day-year-hour-minute-second format to date-time</i>
------------	---

Description

Convert input in month-day-year-hour-minute-second format to date-time

Usage

```
as_mdy_hms(x)
```

Arguments

x	Input variable
---	----------------

Value

Date-time variable of class Date

Examples

```
as_mdy_hms("1-1-2014 12:15:01")
```

as_numeric	<i>Convert variable to numeric avoiding potential issues with factors</i>
------------	---

Description

Convert variable to numeric avoiding potential issues with factors

Usage

```
as_numeric(x)
```

Arguments

x	Input variable
---	----------------

Value

Numeric

Examples

```
as_numeric(rnorm(10))
as_numeric(letters)
as_numeric(5:10 %>% as.factor)
as.numeric(5:10 %>% as.factor)
as_numeric(c("1", "2"))
```

as_tibble	<i>Exporting as_tibble</i>
-----------	----------------------------

Description

Exporting as_tibble

as_ymd	<i>Convert input in year-month-day format to date</i>
--------	---

Description

Convert input in year-month-day format to date

Usage

```
as_ymd(x)
```

Arguments

x	Input variable
---	----------------

Value

Date variable of class Date

Examples

```
as_ymd("2013-1-1")
```

as_ymd_hm*Convert input in year-month-day-hour-minute format to date-time*

Description

Convert input in year-month-day-hour-minute format to date-time

Usage

```
as_ymd_hm(x)
```

Arguments

x Input variable

Value

Date-time variable of class Date

Examples

```
as_ymd_hm("2014-1-1 12:15")
```

as_ymd_hms*Convert input in year-month-day-hour-minute-second format to date-time*

Description

Convert input in year-month-day-hour-minute-second format to date-time

Usage

```
as_ymd_hms(x)
```

Arguments

x Input variable

Value

Date-time variable of class Date

Examples

```
as_ymd_hms("2014-1-1 12:15:01")
## Not run:
as_ymd_hms("2014-1-1 12:15:01") %>% as.Date
as_ymd_hms("2014-1-1 12:15:01") %>% month
as_ymd_hms("2014-1-1 12:15:01") %>% hour

## End(Not run)
```

avengers	<i>Avengers</i>
----------	-----------------

Description

Avengers

Usage

```
data(avengers)
```

Format

A data frame with 7 rows and 4 variables

Details

List of avengers. The dataset is used to illustrate data merging / joining. Description provided in `attr(avengers,"description")`

center	<i>Center</i>
--------	---------------

Description

Center

Usage

```
center(x, na.rm)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

If x is a numeric variable return $x - \text{mean}(x)$

changedata	<i>Change data</i>
------------	--------------------

Description

Change data

Usage

```
changedata(dataset, vars = c(), var_names = names(vars))
```

Arguments

dataset	Name of the dataframe to change
vars	New variables to add to the data.frame
var_names	Names for the new variables to add to the data.frame

Value

None

ci_label	<i>Labels for confidence intervals</i>
----------	--

Description

Labels for confidence intervals

Usage

```
ci_label(alt = "two.sided", cl = 0.95)
```

Arguments

alt	Type of hypothesis ("two.sided", "less", "greater")
cl	Confidence level

Value

A character vector with labels for a confidence interval

Examples

```
ci_label("less", .95)
ci_label("two.sided", .95)
ci_label("greater", .9)
```

ci_perc	<i>Values at confidence levels</i>
---------	------------------------------------

Description

Values at confidence levels

Usage

```
ci_perc(dat, alt = "two.sided", cl = 0.95)
```

Arguments

dat	Data
alt	Type of hypothesis ("two.sided", "less", "greater")
cl	Confidence level

Value

A vector with values at a confidence level

Examples

```
ci_perc(0:100, "less", .95)
ci_perc(0:100, "greater", .95)
ci_perc(0:100, "two.sided", .80)
```

combinedata	<i>Combine datasets using dplyr's bind and join functions</i>
-------------	---

Description

Combine datasets using dplyr's bind and join functions

Usage

```
combinedata(dataset, cmb_dataset, by = "", add = "", type = "inner_join",
  name = "", data_filter = "")
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
cmb_dataset	Dataset name (string) to combine with 'dataset'. This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
by	Variables used to combine 'dataset' and 'cmb_dataset'
add	Variables to add from 'cmb_dataset'

Details

Equivalent of source with local=TRUE for all package functions. Adapted from functions by smbache, author of the import package. See <https://github.com/smbache/import/issues/4> for a discussion. This function will be deprecated when (if) it is included in <https://github.com/smbache/import>

Examples

```
copy_all(radiant.data)
```

copy_from	<i>Source for package functions</i>
-----------	-------------------------------------

Description

Source for package functions

Usage

```
copy_from(.from, ...)
```

Arguments

.from	The package to pull the function from
...	Functions to pull

Details

Equivalent of source with local=TRUE for package functions. Written by smbache, author of the import package. See <https://github.com/smbache/import/issues/4> for a discussion. This function will be deprecated when (if) it is included in <https://github.com/smbache/import>

Examples

```
copy_from(radiant.data, getdata)
```

cv	<i>Coefficient of variation</i>
----	---------------------------------

Description

Coefficient of variation

Usage

```
cv(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

Coefficient of variation

Examples

```
cv(runif (100))
```

data_frame	<i>Exporting data_frame</i>
------------	-----------------------------

Description

Exporting data_frame

describe	<i>Show dataset desription, if available, in html form in Rstudio viewer or default browser</i>
----------	---

Description

Show dataset desription, if available, in html form in Rstudio viewer or default browser

Usage

```
describe(name)
```

Arguments

name	Dataset name or a dataframe
------	-----------------------------

diamonds

Diamond prices

Description

Diamond prices

Usage

```
data(diamonds)
```

Format

A data frame with 3000 rows and 10 variables

Details

A sample of 3,000 from the diamonds dataset bundled with ggplot2. Description provided in `attr(diamonds,"description")`

does_vary

Does a vector have non-zero variability?

Description

Does a vector have non-zero variability?

Usage

```
does_vary(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

Logical. TRUE if there is variability

Examples

```
summarise_each(diamonds, funs(does_vary)) %>% as.logical
```

empty_level	<i>Convert categorical variables to factors and deal with empty/missing values (used in pivotr and explore)</i>
-------------	---

Description

Convert categorical variables to factors and deal with empty/missing values (used in pivotr and explore)

Usage

```
empty_level(x)
```

Arguments

x Categorical variable used in table

Value

Variable with updated levels

explore	<i>Explore data</i>
---------	---------------------

Description

Explore data

Usage

```
explore(dataset, vars = "", byvar = "", fun = c("mean_rm", "sd_rm"),
  tabfilt = "", tabsort = "", nr = NULL, data_filter = "",
  shiny = FALSE)
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
vars	(Numerical) variables to summaries
byvar	Variable(s) to group data by before summarizing
fun	Functions to use for summarizing
tabfilt	Expression used to filter the table. This should be a string (e.g., "Total > 10000")
tabsort	Expression used to sort the table (e.g., "-Total")
nr	Number of rows to display
data_filter	Expression entered in, e.g., Data > View to filter the dataset in Radiant. The expression should be a string (e.g., "price > 10000")
shiny	Logical (TRUE, FALSE) to indicate if the function call originate inside a shiny app

Details

See <http://radiant-rstats.github.io/docs/data/explore.html> for an example in Radiant

Value

A list of all variables defined in the function as an object of class explore

See Also

`summary.explore` to show summaries

Examples

```
result <- explore("diamonds", "price:x")
summary(result)
result <- explore("diamonds", c("price", "carat"), byvar = "cut", fun = c("n_missing", "skew"))
summary(result)
diamonds %>% explore("price", byvar = "cut", fun = c("length", "n_distinct"))
```

factorizer

Convert character to factors as needed

Description

Convert character to factors as needed

Usage

```
factorizer(dat, safx = 20)
```

Arguments

dat	Data frame
safox	Values to levels ratio

Value

Data frame with factors

filterdata	<i>Filter data with user-specified expression</i>
------------	---

Description

Filter data with user-specified expression

Usage

```
filterdata(dat, filt = "")
```

Arguments

dat	Data frame to filter
filt	Filter expression to apply to the specified dataset (e.g., "price > 10000" if dataset is "diamonds")

Value

Filtered data frame

find_dropbox	<i>Find a user's dropbox folder</i>
--------------	-------------------------------------

Description

Find a user's dropbox folder

Usage

```
find_dropbox(account = 1)
```

Arguments

account	If multiple accounts exist specifies the one to use. By default, the first account listed is used
---------	---

Value

Path to Dropbox account

 flip

Flip the DT table to put Function, Variable, or Group by on top

Description

Flip the DT table to put Function, Variable, or Group by on top

Usage

```
flip(expl, top = "fun", rows = NULL)
```

Arguments

expl	Return value from explore
top	The variable (type) to display at the top of the table ("fun" for Function, "var" for Variable, and "byvar" for Group by. "fun" is the default)
rows	Ordering of rows in the table

Details

See <http://radiant-rstats.github.io/docs/data/explore.html> for an example in Radiant

See Also

[explore](#) to generate summaries
[make_expl](#) to create the DT table

Examples

```
result <- explore("diamonds", "price:x") %>% flip("var")

result <- explore("diamonds", "price", byvar = "cut", fun = c("length", "skew")) %>%
  flip("byvar")
```

 formatdf

Format a data.frame with a specified number of decimal places

Description

Format a data.frame with a specified number of decimal places

Usage

```
formatdf(tbl, dec = 3, perc = FALSE, mark = "")
```


Arguments

tbl	Data.frame
dec	Number of decimal places
perc	Display numbers as percentages (TRUE or FALSE)
mark	Thousand separator

Value

Data.frame for printing

Examples

```
data.frame(x = c("a", "b"), y = c(1L, 2L), z = c(-0.0005, 3)) %>%
  formatdf(dec = 3)
data.frame(x = c(1L, 2L), y = c(0.05, 0.8)) %>%
  formatdf(dec = 2, perc = TRUE)
```

formatnr	<i>Format a number with a specified number of decimal places, thousand sep, and a symbol</i>
----------	--

Description

Format a number with a specified number of decimal places, thousand sep, and a symbol

Usage

```
formatnr(x, sym = "", dec = 2, perc = FALSE, mark = ",")
```

Arguments

x	Number or vector
sym	Symbol to use
dec	Number of decimal places
perc	Display number as a percentage
mark	Thousand separator

Value

Character (vector) in the desired format

Examples

```
formatnr(2000, "$")
formatnr(2000, dec = 4)
formatnr(.05, perc = TRUE)
formatnr(c(.1, .99), perc = TRUE)
formatnr(data.frame(a = c(.1, .99)), perc = TRUE)
formatnr(data.frame(a = 1000), sym = "$", dec = 0)
```

getclass	<i>Get variable class</i>
----------	---------------------------

Description

Get variable class

Usage

```
getclass(dat)
```

Arguments

dat	Dataset to evaluate
-----	---------------------

Details

Get variable class information for each column in a data.frame

Value

Vector with class information for each variable

Examples

```
getclass(mtcars)
```

getdata	<i>Get data for analysis functions</i>
---------	--

Description

Get data for analysis functions

Usage

```
getdata(dataset, vars = "", filt = "", rows = NULL, na.rm = TRUE)
```

Arguments

dataset	Name of the dataframe
vars	Variables to extract from the dataframe
filt	Filter to apply to the specified dataset. For example "price > 10000" if dataset is "diamonds" (default is "")
rows	Select rows in the specified dataset. For example "1:10" for the first 10 rows or "n()-10:n()" for the last 10 rows (default is NULL)
na.rm	Remove rows with missing values (default is TRUE)

Value

Data.frame with specified columns and rows

getsummary	Create data.frame summary
------------	---------------------------

Description

Create data.frame summary

Usage

```
getsummary(dat, dc = getclass(dat))
```

Arguments

dat	Data.frame
dc	Class for each variable

Details

Used in Radiant's Data > Transform tab

glance	Exporting glance from broom
--------	-----------------------------

Description

Exporting glance from broom

indexr	Find index corrected for missing values and filters
--------	---

Description

Find index corrected for missing values and filters

Usage

```
indexr(dataset, vars = "", filt = "")
```

Arguments

dataset	Dataset name
vars	Variables to select
filt	Data filter

install_webshot	<i>Install webshot and phantomjs</i>
-----------------	--------------------------------------

Description

Install webshot and phantomjs

Usage

```
install_webshot()
```

inverse	<i>Calculate inverse of a variable</i>
---------	--

Description

Calculate inverse of a variable

Usage

```
inverse(x)
```

Arguments

x	Input variable
---	----------------

Value

1/x

is_empty	<i>Is a character variable defined</i>
----------	--

Description

Is a character variable defined

Usage

```
is_empty(x, empty = "\\s*")
```

Arguments

x	Character value to evaluate
empty	Indicate what 'empty' means. Default is empty string (i.e., "")

Details

Is a variable NULL or an empty string

Value

TRUE if empty, else FALSE

Examples

```
is_empty("")
is_empty(NULL)
is_empty(NA)
is_empty(c())
is_empty("none", empty = "none")
is_empty("")
is_empty(" ")
is_empty(" something ")
```

is_not

Convenience function for is.null or is.na

Description

Convenience function for is.null or is.na

Usage

```
is_not(x)
```

Arguments

x	Input
---	-------

Examples

```
is_not(NA)
is_not(NULL)
is_not(c())
```

is_string

Is input a string?

Description

Is input a string?

Usage

```
is_string(x)
```

Arguments

x	Input
---	-------

Details

Is input a string

Value

TRUE if string, else FALSE

Examples

```
is_string(" ")
is_string("data")
is_string(c("data", "data"))
is_string(NULL)
```

iterms	<i>Create a vector of interaction terms</i>
--------	---

Description

Create a vector of interaction terms

Usage

```
iterms(vars, nway, sep = ":")
```

Arguments

vars	Variables labels to use
nway	2-way (2) or 3-way (3) interactions labels to create
sep	Separator between variable names (default is :)

Value

Character vector of interaction term labels

Examples

```
paste0("var", 1:3) %>% iterms(2)
paste0("var", 1:3) %>% iterms(3)
paste0("var", 1:3) %>% iterms(2, sep = ".")
```

kurtosi	<i>Exporting the kurtosi function from the psych package</i>
---------	--

Description

Exporting the kurtosi function from the psych package

level_list	<i>Generate list of levels and unique values</i>
------------	--

Description

Generate list of levels and unique values

Usage

```
level_list(dat, ...)
```

Arguments

dat	A data.frame
...	Unquoted variable names to evaluate

Examples

```
data.frame(a = c(rep("a",5),rep("b",5)), b = c(rep(1,5),6:10)) %>% level_list  
level_list(mtcars, mpg, cyl)
```

ln	<i>Natural log</i>
----	--------------------

Description

Natural log

Usage

```
ln(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	Remove missing values (default is TRUE)

Value

Natural log of vector

Examples

```
ln(runif(10,1,2))
```

loadcsv	<i>Load a csv file with read.csv and read_csv</i>
---------	---

Description

Load a csv file with read.csv and read_csv

Usage

```
loadcsv(fn, .csv = FALSE, header = TRUE, sep = ",", dec = ".",
  saf = TRUE, safx = 20)
```

Arguments

fn	File name string
.csv	Use read.csv instead of read_csv to load file (default is FALSE)
header	Header in file (TRUE, FALSE)
sep	Use , (default) or ; or \t
dec	Decimal symbol. Use . (default) or ,
saf	Convert character variables to factors if (1) there are less than 100 distinct values (2) there are X (see safx) more values than levels
safox	Values to levels ratio

Value

Data frame with (some) variables converted to factors

loadcsv_url	<i>Load a csv file with from a url</i>
-------------	--

Description

Load a csv file with from a url

Usage

```
loadcsv_url(csv_url, header = TRUE, sep = ",", dec = ".", saf = TRUE,
  safox = 20)
```

Arguments

csv_url	URL for the csv file
header	Header in file (TRUE, FALSE)
sep	Use , (default) or ; or \t
dec	Decimal symbol. Use . (default) or ,
saf	Convert character variables to factors if (1) there are less than 100 distinct values (2) there are X (see safox) more values than levels
safox	Values to levels ratio

Value

Data frame with (some) variables converted to factors

loadr	<i>Load an rda or rds file and add it to the radiant data list (r_data) if available</i>
-------	--

Description

Load an rda or rds file and add it to the radiant data list (r_data) if available

Usage

```
loadr(fn, objname = "")
```

Arguments

fn	File name and path as a string. Extension must be either rda or rds
objname	Name to use for the data frame. Defaults to the file name

Value

Data frame in r_data or in the calling enviroment

loadrda_url	<i>Load an rda file from a url</i>
-------------	------------------------------------

Description

Load an rda file from a url

Usage

```
loadrda_url(rda_url)
```

Arguments

rda_url	URL for the csv file
---------	----------------------

Value

Data frame

`make_dt`*Make a pivot tabel in DT*

Description

Make a pivot tabel in DT

Usage

```
make_dt(pvt, format = "none", perc = FALSE, dec = 3, searchCols = NULL,  
        order = NULL)
```

Arguments

<code>pvt</code>	Return value from pivotr
<code>format</code>	Show Color bar ("color_bar"), Heat map ("heat"), or None ("none")
<code>perc</code>	Display numbers as percentages (TRUE or FALSE)
<code>dec</code>	Number of decimals to show
<code>searchCols</code>	Column search and filter. Used to save and restore state
<code>order</code>	Column sorting. Used to save and restore state

Details

See <http://radiant-rstats.github.io/docs/data/pivotr.html> for an example in Radiant

See Also

[pivotr](#) to create the pivot-table using dplyr

[summary.pivotr](#) to print a plain text table

Examples

```
pivotr("diamonds", cvars = "cut") %>% make_dt  
pivotr("diamonds", cvars = c("cut","clarity")) %>% make_dt(format = "color_bar")  
ret <- pivotr("diamonds", cvars = c("cut","clarity"), normalize = "total") %>%  
  make_dt(format = "color_bar", perc = TRUE)
```

make_expl	<i>Make a tabel of summary statistics in DT</i>
-----------	---

Description

Make a tabel of summary statistics in DT

Usage

```
make_expl(expl, top = "fun", dec = 3, searchCols = NULL, order = NULL)
```

Arguments

expl	Return value from explore
top	The variable (type) to display at the top of the table ("fun" for Function, "var" for Variable, and "byvar" for Group by)
dec	Number of decimals to show
searchCols	Column search and filter. Used to save and restore state
order	Column sorting. Used to save and restore state

Details

See <http://radiant-rstats.github.io/docs/data/explore.html> for an example in Radiant

See Also

[pivotr](#) to create the pivot-table using dplyr
[summary.pivotr](#) to print a plain text table

Examples

```
tab <- explore("diamonds", "price:x") %>% make_expl
tab <- explore("diamonds", "price", byvar = "cut", fun = c("length", "skew")) %>%
  make_expl(top = "byvar")
```

make_funs	<i>Make a list of functions-as-formulas to pass to dplyr</i>
-----------	--

Description

Make a list of functions-as-formulas to pass to dplyr

Usage

```
make_funs(x)
```

Arguments

x	List of functions as strings
---	------------------------------

Value

List of functions to pass to dplyr in formula form

Examples

```
make_funs(c("mean", "sum_rm"))
```

make_train	<i>Generate a variable used to selected a training sample</i>
------------	---

Description

Generate a variable used to selected a training sample

Usage

```
make_train(n = 0.7, nr = 100)
```

Arguments

n	Number (or fraction) of observations to label as training
nr	Number of rows in the dataset

Value

0/1 variables for filtering

Examples

```
make_train(.5, 10)
```

max_rm	<i>Max with na.rm = TRUE</i>
--------	------------------------------

Description

Max with na.rm = TRUE

Usage

```
max_rm(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

Maximum value

Examples

```
max_rm(runif (100))
```

mean_rm	<i>Mean with na.rm = TRUE</i>
---------	-------------------------------

Description

Mean with na.rm = TRUE

Usage

```
mean_rm(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

Mean value

Examples

```
mean_rm(runif (100))
```

median_rm	<i>Median with na.rm = TRUE</i>
-----------	---------------------------------

Description

Median with na.rm = TRUE

Usage

```
median_rm(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

Median value

Examples

```
median_rm(runif (100))
```

min_rm	<i>Min with na.rm = TRUE</i>
--------	------------------------------

Description

Min with na.rm = TRUE

Usage

```
min_rm(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

Minimum value

Examples

```
min_rm(runif (100))
```

mode_rm	<i>Mode with na.rm = TRUE</i>
---------	-------------------------------

Description

Mode with na.rm = TRUE

Usage

```
mode_rm(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

Mode value

Examples

```
mode_rm(diamonds$cut)
```

mutate_each	<i>Add transformed variables to a data frame (NSE)</i>
-------------	--

Description

Add tranformed variables to a data frame (NSE)

Usage

```
mutate_each(tbl, funs, ..., ext = "")
```

Arguments

tbl	Data frame to add transformed variables to
funs	Function(s) to apply (e.g., funs(log))
...	Variables to transform
ext	Extension to add for each variable

Details

Wrapper for dplyr::mutate_each that allows custom variable name extensions

Examples

```
mutate_each(mtcars, funs(log), mpg, cyl, ext = "_log")
```

normalize	<i>Normalize a variable x by a variable y</i>
-----------	---

Description

Normalize a variable x by a variable y

Usage

```
normalize(x, y)
```

Arguments

x	Input variable
y	Normalizing variable

Value

x/y

n_missing

Number of missing values

Description

Number of missing values

Usage

n_missing(x)

Arguments

x Input variable

Value

number of missing values

Examples

n_missing(c("a", "b", NA))

p05

5th percentile

Description

5th percentile

Usage

p05(x, na.rm = TRUE)

Arguments

x Input variable
na.rm If TRUE missing values are removed before calculation

Value

5th percentile

Examples

p05(rnorm(100))

p10	10th percentile
-----	-----------------

Description

10th percentile

Usage

```
p10(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

10th percentile

Examples

```
p10(rnorm(100))
```

p25	25th percentile
-----	-----------------

Description

25th percentile

Usage

```
p25(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

25th percentile

Examples

```
p25(rnorm(100))
```

p75	75th percentile
-----	-----------------

Description

75th percentile

Usage

```
p75(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

75th percentile

Examples

```
p75(rnorm(100))
```

p90	90th percentile
-----	-----------------

Description

90th percentile

Usage

```
p90(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

90th percentile

Examples

```
p90(rnorm(100))
```

p95	<i>95th percentile</i>
-----	------------------------

Description

95th percentile

Usage

```
p95(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

95th percentile

Examples

```
p95(rnorm(100))
```

pivotr	<i>Create a pivot table using dplyr</i>
--------	---

Description

Create a pivot table using dplyr

Usage

```
pivotr(dataset, cvars = "", nvar = "None", fun = "mean_rm",
        normalize = "None", tabfilt = "", tabsort = "", nr = NULL,
        data_filter = "", shiny = FALSE)
```

Arguments

dataset	Name of the dataframe to change
cvars	Categorical variables
nvar	Numerical variable
fun	Function to apply to numerical variable
normalize	Normalize the table by "row" total,"column" totals, or overall "total"
tabfilt	Expression used to filter the table. This should be a string (e.g., "Total > 10000")
tabsort	Expression used to sort the table (e.g., "-Total")
nr	Number of rows to display

data_filter	Expression used to filter the dataset. This should be a string (e.g., "price > 10000")
shiny	Logical (TRUE, FALSE) to indicate if the function call originate inside a shiny app

Details

Create a pivot-table. See <http://radiant-rstats.github.io/docs/data/pivotr.html> for an example in Radiant

Examples

```
result <- pivotr("diamonds", cvars = "cut")$tab
result <- pivotr("diamonds", cvars = c("cut", "clarity", "color"))$tab
result <- pivotr("diamonds", cvars = "cut:clarity", nvar = "price")$tab
result <- pivotr("diamonds", cvars = "cut", nvar = "price")$tab
result <- pivotr("diamonds", cvars = "cut", normalize = "total")$tab
```

plot.character	<i>Don't try to plot strings</i>
----------------	----------------------------------

Description

Don't try to plot strings

Usage

```
## S3 method for class 'character'
plot(x, ...)
```

Arguments

x	A character returned from a function
...	Any additional arguments

plot.pivotr	<i>Plot method for the pivotr function</i>
-------------	--

Description

Plot method for the pivotr function

Usage

```
## S3 method for class 'pivotr'
plot(x, type = "dodge", perc = FALSE, flip = FALSE,
     shiny = FALSE, custom = FALSE, ...)
```

Arguments

x	Return value from <code>pivotr</code>
type	Plot type to use ("fill" or "dodge" (default))
perc	Use percentage on the y-axis
flip	Flip the axes in a plot (FALSE or TRUE)
shiny	Did the function call originate inside a shiny app
custom	Logical (TRUE, FALSE) to indicate if ggplot object (or list of ggplot objects) should be returned. This option can be used to customize plots (e.g., add a title, change x and y labels, etc.). See examples and http://docs.ggplot2.org/ for options.
...	further arguments passed to or from other methods

Details

See <http://radiant-rstats.github.io/docs/data/pivotr> for an example in Radiant

See Also

`pivotr` to generate summaries

`summary.pivotr` to show summaries

Examples

```
pivotr("diamonds", cvars = "cut") %>% plot
pivotr("diamonds", cvars = c("cut", "clarity")) %>% plot
pivotr("diamonds", cvars = c("cut", "clarity", "color")) %>% plot
```

print.gtable

Print/draw method for grobs produced by gridExtra

Description

Print/draw method for grobs produced by gridExtra

Usage

```
## S3 method for class 'gtable'
print(x, ...)
```

Arguments

x	a gtable object
...	further arguments passed to or from other methods

Details

Print method for ggplot grobs created using `arrangeGrob`. Code is based on <https://github.com/baptiste/gridextra/blob/master/inst/testing/shiny.R>

Value

A plot

publishers	<i>Comic publishers</i>
------------	-------------------------

Description

Comic publishers

Usage

```
data(publishers)
```

Format

A data frame with 3 rows and 2 variables

Details

List of comic publishers from http://stat545-ubc.github.io/bit001_dplyr-cheatsheet.html. The dataset is used to illustrate data merging / joining. Description provided in `attr(publishers,"description")`

radiant.data	<i>radiant.data</i>
--------------	---------------------

Description

radiant.data

Launch Radiant in the default browser

Usage

```
radiant.data()
```

Details

See <https://radiant-rstats.github.io/docs> for documentation and tutorials

`radiant.data-deprecated`*Deprecated function(s) in the radiant.data package*

Description

These functions are provided for compatibility with previous versions of radiant. They will eventually be removed.

Usage

```
dfprint(...)
```

Arguments

... Parameters to be passed to the updated functions

Details

dfprint is now a synonym for [formatdf](#)
nrprint is now a synonym for [formatnr](#)

`render`*Method to render objects (i.e., htmlwidgets and rmarkdown files)*

Description

Method to render objects (i.e., htmlwidgets and rmarkdown files)

Usage

```
render(object, ...)
```

Arguments

object Object of relevant class to render
... Additional arguments

<code>render.character</code>	<i>Method to render rmarkdown documents</i>
-------------------------------	---

Description

Method to render rmarkdown documents

Usage

```
## S3 method for class 'character'
render(object, ...)
```

Arguments

<code>object</code>	File path to an R-markdown file
<code>...</code>	Additional arguments passed on to <code>rmarkdown::render</code>

<code>render.datatables</code>	<i>Method to render DT tabels</i>
--------------------------------	-----------------------------------

Description

Method to render DT tabels

Usage

```
## S3 method for class 'datatables'
render(object, ...)
```

Arguments

<code>object</code>	DT table plot
<code>...</code>	Additional arguments

<code>rounddf</code>	<i>Round double in a data.frame to a specified number of decimal places</i>
----------------------	---

Description

Round double in a data.frame to a specified number of decimal places

Usage

```
rounddf(tbl, dec = 3)
```

Arguments

<code>tbl</code>	Data frame
<code>dec</code>	Number of decimal places

Value

Data frame with rounded doubles

Examples

```
data.frame(x = c("a","b"), y = c(1L, 2L), z = c(-0.0005, 3.1)) %>%  
  rounddf(dec = 3)
```

rownames_to_column	<i>Exporting rownames_to_column from tibble</i>
--------------------	---

Description

Exporting rownames_to_column from tibble

saver	<i>Save data.frame as an rda or rds file from Radiant</i>
-------	---

Description

Save data.frame as an rda or rds file from Radiant

Usage

```
saver(objname, file)
```

Arguments

objname	Name of the data frame
file	File name and path as a string. Extension must be either rda or rds

Value

Data frame in r_data

sdp_rm	<i>Standard deviation for the population na.rm = TRUE</i>
--------	---

Description

Standard deviation for the population na.rm = TRUE

Usage

```
sdp_rm(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

Standard deviation for the population

Examples

```
sdp_rm(rnorm(100))
```

sd_rm	<i>Standard deviation with na.rm = TRUE</i>
-------	---

Description

Standard deviation with na.rm = TRUE

Usage

```
sd_rm(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

Standard deviation

Examples

```
sd_rm(rnorm(100))
```

se	<i>Standard error</i>
----	-----------------------

Description

Standard error

Usage

```
se(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

Standard error

Examples

```
se(rnorm(100))
```

Search	<i>Search for a string in all columns of a data.frame</i>
--------	---

Description

Search for a string in all columns of a data.frame

Usage

```
Search(pattern, df, ignore.case = TRUE, fixed = FALSE)
```

Arguments

pattern	String to match
df	Data.frame to search
ignore.case	Should search be case sensitive or not (default is FALSE)
fixed	Allow regular expersions or not (default is FALSE)

Details

See <http://radiant-rstats.github.io/docs/data/view.html> for an example in Radiant

See Also

See [grep1](#) for a more detailed description of the function arguments

set_attr	<i>Alias used to add an attribute</i>
----------	---------------------------------------

Description

Alias used to add an attribute

Usage

```
set_attr(x, which, value)
```

Arguments

x	Object
which	Attribute name
value	Value to set

Examples

```
foo <- data.frame(price = 1:5) %>% set_attr("desc", "price set in experiment ...")
```

show_duplicated	<i>Show all rows with duplicated values (not just the first or last)</i>
-----------------	--

Description

Show all rows with duplicated values (not just the first or last)

Usage

```
show_duplicated(tbl, ...)
```

Arguments

tbl	Data frame to add transformed variables to
...	Variables used to evaluate row uniqueness

Details

If an entire row is duplicated use "duplicated" to show only one of the duplicated rows. When using a subset of variables to establish uniqueness it may be of interest to show all rows that have (some) duplicate elements

Examples

```
bind_rows(mtcars, mtcars[c(1,5,7),]) %>%
  show_duplicated(mpg, cyl)
bind_rows(mtcars, mtcars[c(1,5,7),]) %>%
  show_duplicated
```

sig_stars	<i>Add stars '***' to a data.frame (from broom's 'tidy' function) based on p.values</i>
-----------	---

Description

Add stars '***' to a data.frame (from broom's 'tidy' function) based on p.values

Usage

```
sig_stars(pval)
```

Arguments

pval	Vector of p-values
------	--------------------

Details

Add stars to output from broom's 'tidy' function

Value

A vector of stars

Examples

```
sig_stars(c(.0009, .049, .009, .4, .09))
```

skew	<i>Exporting the skew function from the psych package</i>
------	---

Description

Exporting the skew function from the psych package

square	<i>Calculate square of a variable</i>
--------	---------------------------------------

Description

Calculate square of a variable

Usage

```
square(x)
```

Arguments

x	Input variable
---	----------------

Value

x^2

ssh	<i>Hide warnings and messages and return invisible</i>
-----	--

Description

Hide warnings and messages and return invisible

Usage

```
ssh(...)
```

Arguments

...	Inputs to keep quiet
-----	----------------------

Details

Adapted from <http://www.onthelambda.com/2014/09/17/fun-with-rprofile-and-customizing-r-startup/>

Examples

```
ssh( library(dplyr) )
```

sshhr	<i>Hide warnings and messages and return result</i>
-------	---

Description

Hide warnings and messages and return result

Usage

```
sshhr(...)
```

Arguments

... Inputs to keep quiet

Details

Adapted from <http://www.onthelambda.com/2014/09/17/fun-with-rprofile-and-customizing-r-startup/>

Examples

```
sshhr( library(dplyr) )
```

standardize	<i>Standardize</i>
-------------	--------------------

Description

Standardize

Usage

```
standardize(x, na.rm = TRUE)
```

Arguments

x Input variable

na.rm If TRUE missing values are removed before calculation

Value

If x is a numeric variable return center(x) / mean(x)

store	<i>Method to store variables in a dataset in Radiant</i>
-------	--

Description

Method to store variables in a dataset in Radiant

Usage

```
store(object, ...)
```

Arguments

object	Object of relevant class that has required information to store
...	Additional arguments

store.data.frame	<i>Store method for the Data > View tab</i>
------------------	--

Description

Store method for the Data > View tab

Usage

```
## S3 method for class 'data.frame'
store(object, new = "", org = "",
      envir = parent.frame(), ...)
```

Arguments

object	Filtered data frame from the Data > View tab
new	Name of the new dataset
org	Name of the original data
envir	Environment to assign 'new' dataset (optional). Used if 'new' is specified but an r_data list is not available
...	further arguments passed to or from other methods

Details

Store data frame in Radiant r_data list if available

store.explore	<i>Store method for the explore function</i>
---------------	--

Description

Store method for the explore function

Usage

```
## S3 method for class 'explore'  
store(object, name, top = "fun", ...)
```

Arguments

object	Return value from explore
name	Name to assign to the dataset
top	The variable (type) to display at the top of the table
...	further arguments passed to or from other methods

Details

Add the summarized data to the r_data list in Radiant or return it. See <http://radiant-rstats.github.io/docs/data/explore.html> for an example in Radiant

See Also

[explore](#) to generate summaries

summary.explore	<i>Summary method for the explore function</i>
-----------------	--

Description

Summary method for the explore function

Usage

```
## S3 method for class 'explore'  
summary(object, top = "fun", dec = 3, ...)
```

Arguments

object	Return value from explore
top	The variable (type) to display at the top of the table
dec	Number of decimals to show
...	further arguments passed to or from other methods

Details

See <http://radiant-rstats.github.io/docs/data/explore.html> for an example in Radiant

See Also

[explore](#) to generate summaries

Examples

```
result <- explore("diamonds", "price:x")
summary(result)
result <- explore("diamonds", "price", byvar = "cut", fun = c("length", "skew"))
summary(result)
diamonds %>% explore("price:x") %>% summary
diamonds %>% explore("price", byvar = "cut", fun = c("length", "skew")) %>% summary
```

summary.pivotr

Summary method for pivotr

Description

Summary method for pivotr

Usage

```
## S3 method for class 'pivotr'
summary(object, perc = FALSE, dec = 3, chi2 = FALSE,
        shiny = FALSE, ...)
```

Arguments

object	Return value from pivotr
perc	Display numbers as percentages (TRUE or FALSE)
dec	Number of decimals to show
chi2	If TRUE calculate the chi-square statistic for the (pivot) table
shiny	Did the function call originate inside a shiny app
...	further arguments passed to or from other methods

Details

See <http://radiant-rstats.github.io/docs/data/pivotr.html> for an example in Radiant

See Also

[pivotr](#) to create the pivot-table using dplyr

Examples

```
pivotr("diamonds", cvars = "cut") %>% summary(chi2 = TRUE)
pivotr("diamonds", cvars = "cut", tabsort = "-n") %>% summary
pivotr("diamonds", cvars = "cut", tabfilt = "n > 700") %>% summary
pivotr("diamonds", cvars = "cut:clarity", nvar = "price") %>% summary
```

sum_rm	<i>Sum with na.rm = TRUE</i>
--------	------------------------------

Description

Sum with na.rm = TRUE

Usage

```
sum_rm(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

Sum of input values

Examples

```
sum_rm(1:200)
```

superheroes	<i>Super heroes</i>
-------------	---------------------

Description

Super heroes

Usage

```
data(superheroes)
```

Format

A data frame with 7 rows and 4 variables

Details

List of super heroes from http://stat545-ubc.github.io/bit001_dplyr-cheatsheet.html.
The dataset is used to illustrate data merging / joining. Description provided in attr(superheroes,"description")

table2data	Create data.frame from a table
------------	--------------------------------

Description

Create data.frame from a table

Usage

```
table2data(dat, freq = tail(colnames(dat), 1))
```

Arguments

dat	Data.frame
freq	Column name with frequency information

Examples

```
data.frame(price = c("$200", "$300"), sale = c(10, 2)) %>% table2data
```

tibble	Exporting tibble
--------	------------------

Description

Exporting tibble

tidy	Exporting tidy from broom
------	---------------------------

Description

Exporting tidy from broom

titanic	<i>Survival data for the Titanic</i>
---------	--------------------------------------

Description

Survival data for the Titanic

Usage

```
data(titanic)
```

Format

A data frame with 1043 rows and 10 variables

Details

Survival data for the Titanic. Description provided in `attr(titanic,"description")`

varp_rm	<i>Variance for the population na.rm = TRUE</i>
---------	---

Description

Variance for the population na.rm = TRUE

Usage

```
varp_rm(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

Variance for the population

Examples

```
varp_rm(rnorm(100))
```

var_rm	Variance with na.rm = TRUE
--------	----------------------------

Description

Variance with na.rm = TRUE

Usage

```
var_rm(x, na.rm = TRUE)
```

Arguments

x	Input variable
na.rm	If TRUE missing values are removed before calculation

Value

Variance

Examples

```
var_rm(rnorm(100))
```

viewdata	View data
----------	-----------

Description

View data

Usage

```
viewdata(dataset, vars = "", filt = "", rows = NULL, na.rm = FALSE)
```

Arguments

dataset	Name of the dataframe to change
vars	Variables to show (default is all)
filt	Filter to apply to the specified dataset. For example "price > 10000" if dataset is "diamonds" (default is "")
rows	Select rows in the specified dataset. For example "1:10" for the first 10 rows or "n()-10:n()" for the last 10 rows (default is NULL)
na.rm	Remove rows with missing values (default is FALSE)

Details

View, search, sort, etc. your data

Examples

```
if (interactive()) {
  viewdata(mtcars)
  viewdata("mtcars")
  mtcars %>% viewdata
}
```

visualize

Visualize data using ggplot2 <http://docs.ggplot2.org/current/>**Description**

Visualize data using ggplot2 <http://docs.ggplot2.org/current/>

Usage

```
visualize(dataset, xvar, yvar = "", comby = FALSE, combx = FALSE,
  type = "dist", facet_row = ".", facet_col = ".", color = "none",
  fill = "none", bins = 10, smooth = 1, fun = "mean", check = "",
  axes = "", alpha = 0.5, data_filter = "", shiny = FALSE,
  custom = FALSE)
```

Arguments

dataset	Dataset name (string). This can be a dataframe in the global environment or an element in an <code>r_data</code> list from Radiant
xvar	One or more variables to display along the X-axis of the plot
yvar	Variable to display along the Y-axis of the plot (default = "none")
comby	Combine yvars in plot (TRUE or FALSE, FALSE is the default)
combx	Combine xvars in plot (TRUE or FALSE, FALSE is the default)
type	Type of plot to create. One of Distribution ('dist'), Density ('density'), Scatter ('scatter'), Surface ('surface'), Line ('line'), Bar ('bar'), or Box-plot ('box')
facet_row	Create vertically arranged subplots for each level of the selected factor variable
facet_col	Create horizontally arranged subplots for each level of the selected factor variable
color	Adds color to a scatter plot to generate a 'heat map'. For a line plot one line is created for each group and each is assigned a different color
fill	Display bar, distribution, and density plots by group, each with a different color. Also applied to surface plots to generate a 'heat map'
bins	Number of bins used for a histogram (1 - 50)
smooth	Adjust the flexibility of the loess line for scatter plots
fun	Set the summary measure for line and bar plots when the X-variable is a factor (default is "mean"). Also used to plot an error bar in a scatter plot when the X-variable is a factor. Options are "mean" and/or "median"
check	Add a regression line ("line"), a loess line ("loess"), or jitter ("jitter") to a scatter plot

axes	Flip the axes in a plot ("flip") or apply a log transformation (base e) to the y-axis ("log_y") or the x-axis ("log_x")
alpha	Opacity for plot elements (0 to 1)
data_filter	Expression used to filter the dataset. This should be a string (e.g., "price > 10000")
shiny	Logical (TRUE, FALSE) to indicate if the function call originate inside a shiny app
custom	Logical (TRUE, FALSE) to indicate if ggplot object (or list of ggplot objects) should be returned. This option can be used to customize plots (e.g., add a title, change x and y labels, etc.). See examples and http://docs.ggplot2.org/ for options.

Details

See <http://radiant-rstats.github.io/docs/data/visualize.html> for an example in Radiant

Value

Generated plots

Examples

```
visualize("diamonds", "carat", "price", type = "scatter", check = "loess")
visualize("diamonds", "price:x", type = "dist")
visualize("diamonds", "carat:x", yvar = "price", type = "scatter")
visualize(dataset = "diamonds", yvar = "price", xvar = c("cut", "clarity"),
  type = "bar", fun = "median")
visualize(dataset = "diamonds", yvar = "price", xvar = c("cut", "clarity"),
  type = "line", fun = "max")
visualize(dataset = "diamonds", yvar = "price", xvar = "carat", type = "scatter", custom = TRUE) +
  ggtitle("A scatterplot") + xlab("price in $")
visualize(dataset = "diamonds", xvar = "price:carat", custom = TRUE) %>%
  {.[[1]] + ggtitle("A histogram") + xlab("price in $")}
diamonds %>% visualize(c("price", "carat", "depth"), type = "density")
visualize(dataset = "diamonds", xvar = "cut", yvar = "price", type = "bar",
  facet_row = "cut", fill = "cut", custom = FALSE)
visualize(dataset = "diamonds", xvar = "cut", yvar = "price", type = "line",
  facet_row = "cut", color = "cut", custom = FALSE)
```

weighted.sd

Weighted standard deviation

Description

Weighted standard deviation

Usage

```
weighted.sd(x, wt, na.rm = TRUE)
```


Arguments

x	Numeric vector
wt	Numeric vector of weights
na.rm	Remove missing values (default is TRUE)

Details

Calculated a weighted standard deviation

which.pmax	<i>Returns the index of the (parallel) maxima of the input values</i>
------------	---

Description

Returns the index of the (parallel) maxima of the input values

Usage

```
which.pmax(...)
```

Arguments

... Numeric or character vectors of the same length

Value

Vector of rankings

Examples

```
which.pmax(1:10, 10:1)
which.pmax(2, 10:1)
```

which.pmin	<i>Returns the index of the (parallel) minima of the input values</i>
------------	---

Description

Returns the index of the (parallel) minima of the input values

Usage

```
which.pmin(...)
```

Arguments

... Numeric or character vectors of the same length

Value

Vector of rankings

Examples

```
which.pmin(1:10, 10:1)
which.pmin(2, 10:1)
```

xtile

Create a quintile (or decile) index

Description

Create a quintile (or decile) index

Usage

```
xtile(x, n, rev = FALSE)
```

Arguments

x	Numeric variable
n	number of bins to create
rev	Reverse the order of the xtiles

Details

Same as stata

Examples

```
xtile(1:10,5)
xtile(1:10,5, rev = TRUE)
```

Index

*Topic **datasets**

- avengers, [14](#)
- diamonds, [20](#)
- publishers, [46](#)
- superheroes, [59](#)
- titanic, [61](#)

add_class, [4](#)

as_character, [5](#)

as_data_frame, [5](#)

as_distance, [5](#)

as_dmy, [6](#)

as_dmy_hm, [6](#)

as_dmy_hms, [7](#)

as_duration, [7](#)

as_factor, [8](#)

as_hm, [8](#)

as_hms, [9](#)

as_integer, [9](#)

as_mdy, [10](#)

as_mdy_hm, [11](#)

as_mdy_hms, [11](#)

as_numeric, [12](#)

as_tibble, [12](#)

as_ymd, [12](#)

as_ymd_hm, [13](#)

as_ymd_hms, [13](#)

avengers, [14](#)

center, [14](#)

changedata, [15](#)

ci_label, [15](#)

ci_perc, [16](#)

combinedata, [16](#)

copy_all, [17](#)

copy_from, [18](#)

cv, [19](#)

data_frame, [19](#)

describe, [19](#)

dfprint (radiant.data-deprecated), [47](#)

diamonds, [20](#)

does_vary, [20](#)

empty_level, [21](#)

explore, [21](#), [24](#), [35](#), [57](#), [58](#)

factorizer, [22](#)

filterdata, [23](#)

find_dropbox, [23](#)

flip, [24](#)

formatdf, [24](#), [47](#)

formatnr, [25](#), [47](#)

getclass, [26](#)

getdata, [26](#)

getsummary, [27](#)

glance, [27](#)

grepl, [51](#)

indexr, [27](#)

install_webshot, [28](#)

inverse, [28](#)

is_empty, [28](#)

is_not, [29](#)

is_string, [29](#)

iterms, [30](#)

kurtosi, [30](#)

level_list, [31](#)

ln, [31](#)

loadcsv, [32](#)

loadcsv_url, [32](#)

loadr, [33](#)

loadrda_url, [33](#)

make_dt, [34](#)

make_expl, [24](#), [35](#)

make_funs, [35](#)

make_train, [36](#)

max_rm, [36](#)

mean_rm, [37](#)

median_rm, [37](#)

min_rm, [38](#)

mode_rm, [38](#)

mutate_each, [39](#)

n_missing, [40](#)

normalize, [39](#)

`nrprint (radiant.data-deprecated)`, 47

`p05`, 40

`p10`, 41

`p25`, 41

`p75`, 42

`p90`, 42

`p95`, 43

`pivotr`, 34, 35, 43, 45, 58

`plot.character`, 44

`plot.pivotr`, 44

`print.gtable`, 45

`publishers`, 46

`radiant.data`, 46

`radiant.data-deprecated`, 47

`radiant.data-deprecated-package`
 (`radiant.data-deprecated`), 47

`radiant.data-package (radiant.data)`, 46

`render`, 47

`render.character`, 48

`render.datatables`, 48

`rounddf`, 48

`rownames_to_column`, 49

`saver`, 49

`sd_rm`, 50

`sdp_rm`, 50

`se`, 51

`Search`, 51

`set_attr`, 52

`show_duplicated`, 52

`sig_stars`, 53

`skew`, 53

`square`, 54

`sshh`, 54

`sshhr`, 55

`standardize`, 55

`store`, 56

`store.data.frame`, 56

`store.explore`, 57

`sum_rm`, 59

`summary.explore`, 22, 57

`summary.pivotr`, 34, 35, 45, 58

`superheroes`, 59

`table2data`, 60

`tibble`, 60

`tidy`, 60

`titanic`, 61

`var_rm`, 62

`varp_rm`, 61

`viewdata`, 62

`visualize`, 63

`weighted.sd`, 64

`which.pmax`, 65

`which.pmin`, 65

`xtile`, 66