

# Package ‘pander’

June 13, 2021

**Title** An R 'Pandoc' Writer

**Type** Package

**Encoding** UTF-8

**Description** Contains some functions catching all messages, 'stdout' and other useful information while evaluating R code and other helpers to return user specified text elements (like: header, paragraph, table, image, lists etc.) in 'pandoc' markdown or several type of R objects similarly automatically transformed to markdown format. Also capable of exporting/converting (the resulting) complex 'pandoc' documents to e.g. HTML, 'PDF', 'docx' or 'odt'. This latter reporting feature is supported in brew syntax or with a custom reference class with a smarty caching 'backend'.

**Version** 0.6.4

**Date** 2021-06-08

**URL** <https://rapporter.github.io/pander/>

**BugReports** <https://github.com/rapporter/pander/issues>

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**Depends** R (>= 2.15.0)

**Imports** grDevices, graphics, methods, utils, stats, digest, tools,  
Rcpp

**Suggests** grid, lattice, ggplot2 (>= 0.9.2), sylly, sylly.en, logger,  
survival, microbenchmark, zoo, nlme, descr, MASS, knitr,  
rmarkdown, tables, reshape, memisc, Epi, randomForest, tseries,  
gtable, rms, forecast, data.table

**SystemRequirements** pandoc (<https://johnmacfarlane.net/pandoc/>) for  
exporting markdown files to other formats.

**LinkingTo** Rcpp

**VignetteBuilder** knitr

**RoxygenNote** 7.1.1

**NeedsCompilation** yes

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add.blank.lines	<i>Add trailing and leading blank line</i>
-----------------	--

---

**Description**

Adds a line break before *and* after the character string(s).

**Usage**

```
add.blank.lines(x)
```

**Arguments**

x	character vector
---	------------------

---

`add.significance.stars`*Add significance stars*

---

**Description**

This function adds significance stars to passed p value(s) as: one star for value below 0.05, two for 0.01 and three for 0.001.

**Usage**

```
add.significance.stars(p, cutoffs = c(0.05, 0.01, 0.001))
```

**Arguments**

<code>p</code>	numeric vector or tabular data
<code>cutoffs</code>	the cutoffs for the 1/2/3 significance stars

**Value**

character vector

---

`cache.off`*Toggle cache*

---

**Description**

This function is just a wrapper around [evalsOptions](#) to switch pander's cache on or off easily, which might be handy in some brew documents to prevent repetitive strain injury :)

**Usage**

```
cache.on()
```

```
cache.off()
```

---

coef_mat	<i>Calculate coef matrix for models from rms package Forked from prModFit from rms</i>
----------	--

---

**Description**

Calculate coef matrix for models from rms package Forked from prModFit from rms

**Usage**

```
coef_mat(obj, coefs)
```

**Arguments**

obj	object list
coefs	numeric value if to print only the first n regression coefficients in the model.

**Value**

coeficients matrix

---

emphasize.rows	<i>Emphasize rows/columns/cells</i>
----------------	-------------------------------------

---

**Description**

Storing indexes of cells to be (strong) emphasized of a tabular data in an internal buffer that can be released and applied by [pandoc.table](#), [pander](#) or [evals](#) later.

**Usage**

```
emphasize.rows(x)
```

```
emphasize.cols(x)
```

```
emphasize.cells(x)
```

```
emphasize.strong.rows(x)
```

```
emphasize.strong.cols(x)
```

```
emphasize.strong.cells(x)
```

```
emphasize.italics.rows(x)
```

```
emphasize.italics.cols(x)
emphasize.italics.cells(x)
emphasize.verbatim.rows(x)
emphasize.verbatim.cols(x)
emphasize.verbatim.cells(x)
```

### Arguments

x                    vector of row/columns indexes or an array like returned by `which(..., arr.ind = TRUE)`

### Examples

```
## Not run:
n <- data.frame(x = c(1,1,1,1,1), y = c(0,1,0,1,0))
emphasize.cols(1)
emphasize.rows(1)
pandoc.table(n)

emphasize.strong.cells(which(n == 1, arr.ind = TRUE))
pander(n)

## End(Not run)
```

---

eval.msgs

*Evaluate with messages*

---

### Description

This function takes text(s) of R code and evals all at one run - returning a list with four elements. See Details.

### Usage

```
eval.msgs(
  src,
  env = NULL,
  showInvisible = FALSE,
  graph.unify = evalsOptions("graph.unify")
)
```

## Arguments

<code>src</code>	character values containing R code
<code>env</code>	environment where evaluation takes place. If not set (by default), a new temporary environment is created.
<code>showInvisible</code>	return invisible results?
<code>graph.unify</code>	should <code>eval.msgs</code> try to unify the style of ( <code>lattice</code> and <code>ggplot2</code> ) plots? If set to <code>TRUE</code> (by default), some <code>panderOptions()</code> would apply. Please note that this argument has no effect on base plots, use <code>evals</code> instead.

## Details

`eval.msgs` returns a detailed list of the result of evaluation:

- *src* - character vector of specified R code.
- *result* - result of evaluation. `NULL` if nothing is returned. If any R code returned an R object while evaluating then the *last* R object will be returned as a raw R object. If a graph is plotted in the end of the given R code (remember: *last* R object), it would be automatically printed (see e.g. `lattice` and `ggplot2`).
- *output* - character vector of printed version (`capture.output`) of *result*
- *type* - class of generated output. 'NULL' if nothing is returned, 'error' if some error occurred.
- *msg* - possible messages grabbed while evaluating specified R code with the following structure:
  - *messages* - character vector of possible diagnostic message(s)
  - *warnings* - character vector of possible warning message(s)
  - *errors* - character vector of possible error message(s)
- *stdout* - character vector of possibly printed texts to standard output (console)

## Value

a list of parsed elements each containing: *src* (the command run), *result* (R object: `NULL` if nothing returned), *printed output*, *type* (class of returned object if any), *informative/warning and error messages* (if any returned by the command run, otherwise set to `NULL`) and possible *stdout* value. See Details above.

## See Also

[evals](#)

## Examples

```
## Not run:
eval.msgs('1:5')
eval.msgs('x <- 1:5')
eval.msgs('lm(mtcars$hp ~ mtcars$wt)')

## plots
eval.msgs('plot(runif(100))')
```



```

eval.msgs('histogram(runif(100))')

## error handling
eval.msgs('runif(23)')
eval.msgs('runif is a nice function')
eval.msgs('no.R.object.like.that')

## messages
eval.msgs(c('message("FOO")', '1:2'))
eval.msgs(c('warning("FOO")', '1:2'))
eval.msgs(c('message("FOO");message("FOO");warning("FOO")', '1:2'))
eval.msgs('warning("d");warning("f");1')

## stdout
eval.msgs('cat("writing to console")')
eval.msgs('cat("writing to console");1:4')

## End(Not run)

```

---

evals

*Evaluate and Process R Code*


---

## Description

This function takes either a vector/list of *strings* with actual R code, which it to be parsed to separate elements. Each list element is evaluated in a special environment, and a detailed list of results is returned for each logical part of the R code: a character value with R code, resulting R object, printed output, class of resulting R object, possible informative/warning/error messages and anything written to stdout. If a graph is plotted in the given text, the returned object is a string specifying the path to the saved file. Please see Details below. If parse option set to FALSE, then the returned list's length equals to the length of the parsed input - as each string is evaluated as separate R code in the same environment. If a nested list of R code or a concatenated string (separated by \n or ;) is provided like `list(c('runif(1)', 'runif(1)'))` with `parse=FALSE`, then everything is eval'd at one run so the length of returned list equals to one or the length of the provided nested list. See examples below.

## Usage

```

evals(
  txt,
  parse = evalsOptions("parse"),
  cache = evalsOptions("cache"),
  cache.mode = evalsOptions("cache.mode"),
  cache.dir = evalsOptions("cache.dir"),
  cache.time = evalsOptions("cache.time"),
  cache.copy.images = evalsOptions("cache.copy.images"),
  showInvisible = FALSE,
  classes = evalsOptions("classes"),
  hooks = evalsOptions("hooks"),

```

```

length = evalsOptions("length"),
output = evalsOptions("output"),
env = NULL,
graph.unify = evalsOptions("graph.unify"),
graph.name = evalsOptions("graph.name"),
graph.dir = evalsOptions("graph.dir"),
graph.output = evalsOptions("graph.output"),
width = evalsOptions("width"),
height = evalsOptions("height"),
res = evalsOptions("res"),
hi.res = evalsOptions("hi.res"),
hi.res.width = evalsOptions("hi.res.width"),
hi.res.height = 960 * (height/width),
hi.res.res = res * (hi.res.width/width),
graph.env = evalsOptions("graph.env"),
graph.recordplot = evalsOptions("graph.recordplot"),
graph.RDS = evalsOptions("graph.RDS"),
log = evalsOptions("log"),
...
)

```

### Arguments

<code>txt</code>	a character vector containing R code. This could be a list/vector of lines of code or a simple string holding R code separated by ; or \n.
<code>parse</code>	if TRUE the provided <code>txt</code> elements would be merged into one string and parsed to logical chunks. This is useful if you would want to get separate results of your code parts - not just the last returned value, but you are passing the whole script in one string. To manually lock lines to each other (e.g. calling a plot and on next line adding an <code>abline</code> or <code>text</code> to it), use a plus char (+) at the beginning of each line which should be evaluated with the previous one(s). If set to FALSE, <code>evals</code> would not try to parse R code, it would get evaluated in separate runs - as provided. Please see examples below.
<code>cache</code>	caching the result of R calls if set to TRUE. Please note the caching would not work if <code>parse</code> set to FALSE or syntax error is to be found.
<code>cache.mode</code>	cached results could be stored in an environment in <i>current</i> R session or let it be permanent on disk.
<code>cache.dir</code>	path to a directory holding cache files if <code>cache.mode</code> set to disk. Default to <code>.cache</code> in current working directory.
<code>cache.time</code>	number of seconds to limit caching based on <code>proc.time</code> . If set to 0, all R commands, if set to Inf, none is cached (despite the cache parameter).
<code>cache.copy.images</code>	copy images to new file names if an image is returned from the <i>disk</i> cache? If set to FALSE (default), the cached path would be returned.
<code>showInvisible</code>	return invisible results?
<code>classes</code>	a vector or list of classes which should be returned. If set to NULL (by default) all R objects will be returned.

hooks	list of hooks to be run for given classes in the form of <code>list(class = fn)</code> . If you would also specify some parameters of the function, a list should be provided in the form of <code>list(fn,param1,param2=NULL)</code> etc. So the hooks would become <code>list(class1=list(fn,param1,param2=NULL),...)</code> . See example below. A default hook can be specified too by setting the class to 'default'. This can be handy if you do not want to define separate methods/functions to each possible class, but automatically apply the default hook to all classes not mentioned in the list. You may also specify only one element in the list like: <code>hooks=list('default' = pander_return)</code> . Please note, that nor error/warning messages, nor stdout is captured (so: updated) while running hooks!
length	any R object exceeding the specified length will not be returned. The default value (Inf) does not filter out any R objects.
output	a character vector of required returned values. This might be useful if you are only interested in the result, and do not want to save/see e.g. messages or printed output. See examples below.
env	environment where evaluation takes place. If not set (by default), a new temporary environment is created.
graph.unify	should evals try to unify the style of (base, lattice and ggplot2) plots? If set to TRUE, some <code>panderOptions()</code> would apply. By default this is disabled not to freak out useRs :)
graph.name	set the file name of saved plots which is <code>tempfile</code> by default. A simple character string might be provided where <code>%d</code> would be replaced by the index of the generating txt source, <code>%n</code> with an incremented integer in <code>graph.dir</code> with similar file names and <code>%t</code> by some unique random characters. While running in <code>Pandoc.brew</code> other indices could be triggered like <code>%i</code> and <code>%I</code> .
graph.dir	path to a directory where to place generated images. If the directory does not exist, evals try to create that. Default set to <code>plots</code> in current working directory.
graph.output	set the required file format of saved plots. Currently it could be any of <code>grDevices</code> ': <code>png</code> , <code>bmp</code> , <code>jpeg</code> , <code>jpg</code> , <code>tiff</code> , <code>svg</code> or <code>pdf</code> .
width	width of generated plot in pixels for even vector formats
height	height of generated plot in pixels for even vector formats
res	nominal resolution in ppi. The height and width of vector images will be calculated based in this.
hi.res	generate high resolution plots also? If set to TRUE, each R code parts resulting an image would be run twice.
hi.res.width	width of generated high resolution plot in pixels for even vector formats
hi.res.height	height of generated high resolution plot in pixels for even vector formats. This value can be left blank to be automatically calculated to match original plot aspect ratio.
hi.res.res	nominal resolution of high resolution plot in ppi. The height and width of vector plots will be calculated based in this. This value can be left blank to be automatically calculated to fit original plot scales.
graph.env	save the environments in which plots were generated to distinct files (based on <code>graph.name</code> ) with <code>env</code> extension?

<code>graph.recordplot</code>	save the plot via <code>recordPlot</code> to distinct files (based on <code>graph.name</code> ) with <code>recodplot</code> extension?
<code>graph.RDS</code>	save the raw R object returned (usually with <code>lattice</code> or <code>ggplot2</code> ) while generating the plots to distinct files (based on <code>graph.name</code> ) with RDS extension?
<code>log</code>	an optionally passed <i>namespace</i> for <b>logger</b> to record all info, trace, debug and error messages.
<code>...</code>	optional parameters passed to graphics device (e.g. <code>bg</code> , <code>pointsize</code> etc.)

## Details

As `evals` tries to grab the plots internally, please do not run commands that set graphic device or `dev.off`. E.g. running `evals(c('png("/tmp/x.png)", 'plot(1:10)', 'dev.off()'))` would fail. Printing of `lattice` and `ggplot2` objects is not needed, `evals` would deal with that automatically.

The generated image file(s) of the plots can be fine-tuned by some specific options, please check out `graph.output`, `width`, `height`, `res`, `hi.res`, `hi.res.width`, `hi.res.height` and `hi.res.res` parameters. Most of these options are better not to touch, see details of parameters below.

Returned result values: list with the following elements

- `src` - character vector of specified R code.
- `result` - result of evaluation. `NULL` if nothing is returned. If any R code returned an R object while evaluating then the *last* R object will be returned as a raw R object. If a graph is plotted in the given text, the returned object is a string (with `class` set to `image`) specifying the path to the saved image file. If graphic device was touched, then no other R objects will be returned.
- `output` - character vector of printed version (`capture.output`) of `result`
- `type` - class of generated output. `'NULL'` if nothing is returned, `'error'` if some error occurred.
- `msg` - possible messages grabbed while evaluating specified R code with the following structure:
  - `messages` - character vector of possible diagnostic message(s)
  - `warnings` - character vector of possible warning message(s)
  - `errors` - character vector of possible error message(s)
- `stdout` - character vector of possibly printed texts to standard output (console)

By default `evals` tries to *cache* results. This means that if evaluation of some R commands take too much time (specified in `cache.time` parameter), then `evals` would save the results in a file and return from there on next exact R code's evaluation. This caching algorithm tries to be smart as checks not only the passed R sources, but all variables inside that and saves the hash of those.

Technical details of the caching algorithm:

- Each passed R chunk is parsed to single commands.
- Each parsed command's part (let it be a function, variable, constant etc.) evaluated (as a name) separately to a list. This list describes the unique structure and the content of the passed R commands, and has some IMHO really great benefits (see examples below).

- A hash is computed to each list element and cached too in pander's local environments. This is useful if you are using large data frames, just imagine: the caching algorithm would have to compute the hash for the same data frame each time it's touched! This way the hash is recomputed only if the R object with the given name is changed.
- The list is serialized and an SHA-1 hash is computed for that - which is unique and there is no real risk of collision.
- If evals can find the cached results in a file named to the computed hash, then it is returned on the spot.
- Otherwise the call is evaluated and the results are optionally saved to cache (e.g. if cache is active, if the `proc.time()` of the evaluation is higher then it is defined in `cache.time` etc.).

This is a quite secure way of caching, but if you would encounter any issues, just set `cache` to `FALSE` or tweak other cache parameters. While setting `cache.dir`, please do think about what you are doing and move your `graph.dir` accordingly, as `evals` might result in returning an image file path which is not found any more on your file system!

Also, if you have generated a plot and rendered that to e.g. `png` before and later try to get e.g. `pdf` - it would fail with `cache` on. Similarly you cannot render a high resolution image of a cached image, but you have to (temporary) disable caching.

The default `evals` options could be set globally with `evalsOptions`, e.g. to switch off the cache just run `evalsOptions('cache', FALSE)`.

Please check the examples carefully below to get a detailed overview of `evals`.

## Value

a list of parsed elements each containing: `src` (the command run), `result` (R object: `NULL` if nothing returned, path to image file if a plot was generated), `printed output`, `type` (class of returned object if any), `informative/wawrning` and `error messages` (if any returned by the command run, otherwise set to `NULL`) and possible `stdoutt` value. See Details above.

## See Also

[eval.msgs](#) [evalsOptions](#)

## Examples

```
## Not run:
# parsing several lines of R code
txt <- readLines(textConnection('x <- rnorm(100)
  runif(10)
  warning('Lorem ipsum foo-bar-foo!')
  plot(1:10)
  qplot(rating, data = movies, geom = 'histogram')
  y <- round(runif(100))
  cor.test(x, y)
  cor1 <- cor.test(runif(10), runif(10))
  table(mtcars$am, mtcars$cyl)
  ggplot(mtcars) + geom_point(aes(x = hp, y = mpg)))')
evals(txt)
```

```

## parsing a list of commands
txt <- list('df <- mtcars',
  c('plot(mtcars$hp, pch = 19)', 'text(mtcars$hp, label = rownames(mtcars), pos = 4)'),
  'ggplot(mtcars) + geom_point(aes(x = hp, y = mpg))')
evals(txt)

## the same commands in one string but also evaluating the `plot` with `text`
## (note the leading '+' on the beginning of `text...` line)
txt <- 'df <- mtcars
plot(mtcars$hp, pch = 19)
+text(mtcars$hp, label = rownames(mtcars), pos = 4)
ggplot(mtcars) + geom_point(aes(x = hp, y = mpg))'
evals(txt)
## but it would fail without parsing
evals(txt, parse = FALSE)

## handling messages
evals('message(20)')
evals('message(20);message(20)', parse = FALSE)

## adding a caption to a plot
evals('set.caption("F00"); plot(1:10)')
## `plot` is started with a `+` to eval the codes in the same chunk
## (no extra chunk with NULL result)
evals('set.caption("F00"); +plot(1:10)')

## handling warnings
evals('chisq.test(mtcars$gear, mtcars$hp)')
evals(list(c('chisq.test(mtcars$gear, mtcars$am)', 'pi',
  'chisq.test(mtcars$gear, mtcars$hp)'), parse = FALSE)
evals(c('chisq.test(mtcars$gear, mtcars$am)',
  'pi',
  'chisq.test(mtcars$gear, mtcars$hp)'))

## handling errors
evals('runif(20)')
evals('Old MacDonald had a farm\\dots')
evals('## Some comment')
evals(c('runif(20)', 'Old MacDonald had a farm?'))
evals(list(c('runif(20)', 'Old MacDonald had a farm?')), parse = FALSE)
evals(c('mean(1:10)', 'no.R.function()'))
evals(list(c('mean(1:10)', 'no.R.function()')), parse = FALSE)
evals(c('no.R.object', 'no.R.function()', 'very.mixed.up(stuff)'))
evals(list(c('no.R.object', 'no.R.function()', 'very.mixed.up(stuff)'), parse = FALSE)
evals(c('no.R.object', 'Old MacDonald had a farm\\dots', 'pi'))
evals('no.R.object;Old MacDonald had a farm\\dots;pi', parse = FALSE)
evals(list(c('no.R.object', 'Old MacDonald had a farm\\dots', 'pi')), parse = FALSE)

## graph options
evals('plot(1:10)')
evals('plot(1:10);plot(2:20)')
evals('plot(1:10)', graph.output = 'jpg')
evals('plot(1:10)', height = 800)

```

```

evals('plot(1:10)', height = 800, hi.res = TRUE)
evals('plot(1:10)', graph.output = 'pdf', hi.res = TRUE)
evals('plot(1:10)', res = 30)
evals('plot(1:10)', graph.name = 'myplot')
evals(list('plot(1:10)', 'plot(2:20)'), graph.name = 'myplots-%d')
evals('plot(1:10)', graph.env = TRUE)
evals('x <- runif(100);plot(x)', graph.env = TRUE)
evals(c('plot(1:10)', 'plot(2:20)'), graph.env = TRUE)
evals(c('x <- runif(100)', 'plot(x)', 'y <- runif(100)', 'plot(y)'), graph.env = TRUE)
evals(list(
  c('x <- runif(100)', 'plot(x)'),
  c('y <- runif(100)', 'plot(y)'),
  graph.env = TRUE, parse = FALSE)
evals('plot(1:10)', graph.recordplot = TRUE)
## unprinted lattice plot
evals('histogram(mtcars$hp)', graph.recordplot = TRUE)

## caching
system.time(evals('plot(mtcars)'))
system.time(evals('plot(mtcars)')) # running again to see the speed-up :)
system.time(evals('plot(mtcars)', cache = FALSE)) # cache disabled

## caching mechanism does check what's inside a variable:
x <- mtcars
evals('plot(x)')
x <- cbind(mtcars, mtcars)
evals('plot(x)')
x <- mtcars
system.time(evals('plot(x)'))

## stress your CPU - only once!
evals('x <- sapply(rep(mtcars$hp, 1e3), mean)') # run it again!

## play with cache
require(lattice)
evals('histogram(rep(mtcars$hp, 1e5))')
## nor run the below call
## that would return the cached version of the above call :)
f <- histogram
g <- rep
A <- mtcars$hp
B <- 1e5
evals('f(g(A, B))')#

## or switch off cache globally:
evalsOptions('cache', FALSE)
## and switch on later
evalsOptions('cache', TRUE)

## evaluate assignments inside call to evals
## changes to environments are cached properly and retrieved
evalsOptions('cache.time', 0)
x <- 2

```

```

evals('x <- x^2')[[1]]$result
evals('x <- x^2; x + 1')[[2]]$result
evalsOptions('cache.time', 0.1)

## returning only a few classes
txt <- readLines(textConnection('rnorm(100)
  list(x = 10:1, y = 'Godzilla!')
  c(1,2,3)
  matrix(0,3,5)'))
evals(txt, classes = 'numeric')
evals(txt, classes = c('numeric', 'list'))

## hooks
txt <- 'runif(1:4); matrix(runif(25), 5, 5); 1:5'
hooks <- list('numeric' = round, 'matrix' = pander_return)
evals(txt, hooks = hooks)
## using pander's default hook
evals(txt, hooks = list('default' = pander_return))
evals('22/7', hooks = list('numeric' = round))
evals('matrix(runif(25), 5, 5)', hooks = list('matrix' = round))

## setting default hook
evals(c('runif(10)', 'matrix(runif(9), 3, 3)'),
  hooks = list('default'=round))
## round all values except for matrices
evals(c('runif(10)', 'matrix(runif(9), 3, 3)'),
  hooks = list(matrix = 'print', 'default' = round))

# advanced hooks
hooks <- list('numeric' = list(round, 2), 'matrix' = list(round, 1))
evals(txt, hooks = hooks)

# return only returned values
evals(txt, output = 'result')

# return only messages (for checking syntax errors etc.)
evals(txt, output = 'msg')

# check the length of returned values and do not return looong R objects
evals('runif(10)', length = 5)

# note the following will not be filtered!
evals('matrix(1,1,1)', length = 1)

# if you do not want to let such things be eval-ed in the middle of a string
# use it with other filters :)
evals('matrix(1,1,1)', length = 1, classes = 'numeric')

# hooks & filtering
evals('matrix(5,5,5)',
  hooks = list('matrix' = pander_return),
  output = 'result')

```



```

# eval-ing chunks in given environment
myenv <- new.env()
evals('x <- c(0,10)', env = myenv)
evals('mean(x)', env = myenv)
rm(myenv)
# note: if you had not specified 'myenv', the second 'evals' would have failed
evals('x <- c(0,10)')
evals('mean(x)')

# log
x <- evals('1:10', log = 'foo')
# trace log
evalsOptions('cache.time', 0)
x <- evals('1:10', log = 'foo')
x <- evals('1:10', log = 'foo')
# log to file
t <- tempfile()
log_appender(appender_file(t), name = 'evals')
x <- evals('1:10', log = 'evals')
readLines(t)
# permanent log for all events
evalsOptions('log', 'evals')
log_threshold	TRACE, 'evals')
evals('foo')

## End(Not run)

```

---

evalsOptions

*Querying/setting evals option*


---

## Description

To list all evals options, just run this function without any parameters provided. To query only one value, pass the first parameter. To set that, use the value parameter too.

## Usage

```
evalsOptions(o, value)
```

## Arguments

o	option name (string). See below.
value	value to assign (optional)

## Details

The following evals options are available:

- `parse`: if TRUE the provided `txt` elements would be merged into one string and parsed to logical chunks. This is useful if you would want to get separate results of your code parts - not just the last returned value, but you are passing the whole script in one string. To manually lock lines to each other (e.g. calling a plot and on next line adding an abline or text to it), use a plus char (+) at the beginning of each line which should be evaluated with the previous one(s). If set to FALSE, `evals` would not try to parse R code, it would get evaluated in separate runs - as provided. Please see examples of [evals](#).
- `cache`: caching the result of R calls if set to TRUE
- `cache.mode`: cached results could be stored in an environment in *current* R session or let it be permanent on disk.
- `cache.dir`: path to a directory holding cache files if `cache.mode` set to disk. Default to `.cache` in current working directory.
- `cache.time`: number of seconds to limit caching based on `proc.time`. If set to 0, all R commands, if set to `Inf`, none is cached (despite the `cache` parameter).
- `cache.copy.images`: copy images to new files if an image is returned from cache? If set to FALSE (default) the "old" path would be returned.
- `classes`: a vector or list of classes which should be returned. If set to NULL (by default) all R objects will be returned.
- `hooks`: list of hooks to be run for given classes in the form of `list(class = fn)`. If you would also specify some parameters of the function, a list should be provided in the form of `list(fn, param1, param2=NULL)` etc. So the hooks would become `list(class1=list(fn, param1, param2=NULL), ...)`. See examples of [evals](#). A default hook can be specified too by setting the class to 'default'. This can be handy if you do not want to define separate methods/functions to each possible class, but automatically apply the default hook to all classes not mentioned in the list. You may also specify only one element in the list like: `hooks=list('default' = pander_return)`. Please note, that nor error/warning messages, nor stdout is captured (so: updated) while running hooks!
- `length`: any R object exceeding the specified length will not be returned. The default value (`Inf`) does not filter out any R objects.
- `output`: a character vector of required returned values. This might be useful if you are only interested in the result, and do not want to save/see e.g. messages or printed output. See examples of [evals](#).
- `graph.unify`: boolean (default: FALSE) that determines if `evals` should try to unify the style of (base, lattice and `ggplot2`) plots? If set to TRUE, some `panderOptions()` would apply.
- `graph.name`: set the file name of saved plots which is `tempfile` by default. A simple character string might be provided where `%d` would be replaced by the index of the generating `txt` source, `%n` with an incremented integer in `graph.dir` with similar file names and `%t` by some random characters. A function's name to be evaluated can be passed here too.
- `graph.dir`: path to a directory where to place generated images. If the directory does not exist, [evals](#) try to create that. Default set to plots in current working directory.
- `graph.output`: set the required file format of saved plots. Currently it could be any of `grDevices`: `png`, `bmp`, `jpeg`, `jpg`, `tiff`, `svg` or `pdf`. Set to `NA` not to save plots at all and tweak that setting with `capture.plot()` on demand.
- `width`: width of generated plot in pixels for even vector formats

- `height`: height of generated plot in pixels for even vector formats
- `res`: nominal resolution in ppi. The height and width of vector images will be calculated based in this.
- `hi.res`: generate high resolution plots also? If set to TRUE, each R code parts resulting an image would be run twice.
- `hi.res.width`: width of generated high resolution plot in pixels for even vector formats. The height and `res` of high resolution image is automatically computed based on the above options to preserve original plot aspect ratio.
- `graph.env`: save the environments in which plots were generated to distinct files (based on `graph.name`) with `env` extension?
- `graph.recordplot`: save the plot via `recordPlot` to distinct files (based on `graph.name`) with `recodplot` extension?
- `graph.RDS`: save the raw R object returned (usually with `lattice` or `ggplot2`) while generating the plots to distinct files (based on `graph.name`) with RDS extension?
- `log`: NULL or an optionally passed *namespace* from **logger** to record all info, trace, debug and error messages.

### See Also

[evals.panderOptions](#)

### Examples

```
evalsOptions()  
evalsOptions('cache')  
evalsOptions('cache', FALSE)
```

---

`has.rownames`

*Check if rownames are available*

---

### Description

Dummy helper to check if the R object has real rownames or not.

### Usage

```
has.rownames(x)
```

### Arguments

`x` a tabular-like R object

### Value

TRUE OR FALSE

---

openFileInOS                      *Open file*

---

### Description

Tries to open a file with operating system's default program.

### Usage

```
openFileInOS(f)
```

### Arguments

f                                      file (with full path)

### References

This function is a fork of David Hajage's convert function: <https://github.com/eusebe/ascii/blob/master/R/export.r>

---

p                                      *Inline Printing*

---

### Description

`p` merges elements of a vector in one string for the sake of pretty inline printing. Default parameters are read from appropriate option values (see argument description for details). This function allows you to put the results of an expression that yields a variable *inline*, by wrapping the vector elements with the string provided in `wrap`, and separating elements by main and ending separator (`sep` and `copula`). In case of a two-length vector, value specified in `copula` will be used as a separator. You can also control the length of provided vector by altering an integer value specified in `limit` argument (defaults to `Inf`).

### Usage

```
p(
  x,
  wrap = panderOptions("p.wrap"),
  sep = panderOptions("p.sep"),
  copula = panderOptions("p.copula"),
  limit = Inf,
  keep.trailing.zeros = panderOptions("keep.trailing.zeros"),
  missing = panderOptions("missing"),
  digits = panderOptions("digits"),
  round = panderOptions("round")
)
```

## Arguments

x	an atomic vector to get merged for inline printing
wrap	a string to wrap vector elements (uses value set in p.wrap option: '_' by default, which is a markdown-friendly wrapper and it puts the string in <i>italic</i> )
sep	a string with the main separator, i.e. the one that separates all vector elements but the last two (uses the value set in p.sep option - ', ' by default)
copula	a string with ending separator - the one that separates the last two vector elements (uses the value set in p.copula option, 'and' by default)
limit	maximum character length (defaults to Infinitive elements)
keep.trailing.zeros	to show or remove trailing zeros in numbers
missing	string to replace missing values
digits	numeric (default: 2) passed to format
round	numeric (default: Inf) passed to round

## Value

a string with concatenated vector contents

## Author(s)

Aleksandar Blagotic

## References

This function was moved from rapport package: <https://rapporter.github.io/rapport/>.

## Examples

```
p(c('fee', 'fi', 'foo', 'fam'))
# [1] '_fee_, _fi_, _foo_ and _fam_'
p(1:3, wrap = '')
# [1] '1, 2 and 3'
p(LETTERS[1:5], copula = 'and the letter')
# [1] '_A_, _B_, _C_, _D_ and the letter _E_'
p(c('Thelma', 'Louise'), wrap = '', copula = '&')
# [1] 'Thelma & Louise'
```

---

pander                      *Generic pander method*

---

### Description

Prints an R object in Pandoc's markdown.

### Usage

```
pander(x = NULL, ...)
```

### Arguments

x	an R object
...	optional parameters passed to special methods and/or raw pandoc.* functions

### Value

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

### Note

This function can be called by `pander` and `pandoc` too.

### References

- John MacFarlane (2013): `_Pandoc User's Guide_`. <https://johnmacfarlane.net/pandoc/README.html>
- David Hajage (2011): `_ascii. Export R objects to several markup languages_`. <https://cran.r-project.org/package=ascii>
- Hlavac, Marek (2013): `_stargazer: LaTeX code for well-formatted regression and summary statistics tables_`. <https://cran.r-project.org/package=stargazer>

### Examples

```
## Vectors
pander(1:10)
pander(letters)
pander(mtcars$am)
pander(factor(mtcars$am))

## Lists
pander(list(1, 2, 3, c(1, 2)))
pander(list(a = 1, b = 2, c = table(mtcars$am)))
pander(list(1, 2, 3, list(1, 2)))
pander(list(a = 1, 2, 3, list(1, 2)))
```

```

pander(list('F00', letters[1:3], list(1:5), table(mtcars$gear), list('FOOBAR', list('a', 'b'))))
pander(list(a = 1, b = 2, c = table(mtcars$am), x = list(myname = 1, 2), 56))
pander(unclass(chisq.test(table(mtcars$am, mtcars$gear))))

## Arrays
pander(mtcars)
pander(table(mtcars$am))
pander(table(mtcars$am, mtcars$gear))

## Tests
pander(ks.test(runif(50), runif(50)))
pander(chisq.test(table(mtcars$am, mtcars$gear)))
pander(t.test(extra ~ group, data = sleep))

## Models
m1 <- with(lm(mpg ~ hp + wt), data = mtcars)
pander(m1)
pander(anova(m1))
pander(aov(m1))
## Dobson (1990) Page 93: Randomized Controlled Trial (examples from: ?glm)
counts <- c(18, 17, 15, 20, 10, 20, 25, 13, 12)
outcome <- gl(3, 1, 9)
treatment <- gl(3, 3)
m <- glm(counts ~ outcome + treatment, family = poisson())
pander(m)
pander(anova(m))
pander(aov(m))
## overwriting labels
pander(lm(Sepal.Width ~ Species, data = iris), covariate.labels = c('Versicolor', 'Virginica'))

## Prcomp
pander(prcomp(USArrests))

## Others
pander(density(runif(10)))
pander(density(mtcars$hp))

## default method
x <- chisq.test(table(mtcars$am, mtcars$gear))
class(x) <- 'I heave never heard of!'
pander(x)

```

---

pander.anova

*Pander method for anova class*


---

## Description

Prints an anova object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'anova'
pander(x, caption = attr(x, "caption"), add.significance.stars = FALSE, ...)
```

**Arguments**

x	an anova object
caption	caption (string) to be shown under the table
add.significance.stars	if significance stars should be shown for P value
...	optional parameters passed to raw pandoc.table function

---

pander.aov	<i>Pander method for aov class</i>
------------	------------------------------------

---

**Description**

Prints an aov object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'aov'
pander(x, caption = attr(x, "caption"), ...)
```

**Arguments**

x	an aov object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.aovlist	<i>Pander method for aovlist class</i>
----------------	--

---

**Description**

Prints an aovlist object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'aovlist'
pander(x, caption = attr(x, "caption"), ...)
```

**Arguments**

x	an aovlist object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function



---

pander.Arima                    *Prints an arima object from stats package in Pandoc's markdown.*

---

### Description

Prints an arima object from stats package in Pandoc's markdown.

### Usage

```
## S3 method for class 'Arima'
pander(x, digits = panderOptions("digits"), se = TRUE, ...)
```

### Arguments

x	an arima object
digits	number of digits of precision
se	if to include standard error in coefficients table (default TRUE)
...	optional parameters passed to raw pandoc.table function

---

pander.call                    *Pander method for call class*

---

### Description

Prints a call object in Pandoc's markdown.

### Usage

```
## S3 method for class 'call'
pander(x, ...)
```

### Arguments

x	a call object
...	optional parameters passed to raw pandoc.formula function

---

pander.cast\_df      *Pander method for cast\_df class*

---

### Description

Prints a cast\_df object in Pandoc's markdown.

### Usage

```
## S3 method for class 'cast_df'  
pander(x, caption = attr(x, "caption"), ...)
```

### Arguments

x	a cast_df object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.character      *Pander method for character class*

---

### Description

Prints a character class in Pandoc's markdown.

### Usage

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

### Arguments

x	a character object
...	ignored parameters

---

pander.clogit	<i>Pander method for clogit class</i>
---------------	---------------------------------------

---

**Description**

Prints a clogit object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'clogit'  
pander(x, caption = attr(x, "caption"), ...)
```

**Arguments**

x	an clogit object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.coxph	<i>Pander method for coxph class</i>
--------------	--------------------------------------

---

**Description**

Prints a coxph object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'coxph'  
pander(x, caption = attr(x, "caption"), ...)
```

**Arguments**

x	an coxph object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.cph	<i>Prints an cph object from rms package in Pandoc's markdown.</i>
------------	--

---

**Description**

Prints an cph object from rms package in Pandoc's markdown.

**Usage**

```
## S3 method for class 'cph'
pander(x, table = TRUE, conf.int = FALSE, coefs = TRUE, ...)
```

**Arguments**

x	an cph object
table	if to print event frequency statistics. default(TRUE)
conf.int	set to e.g. .95 to print 0.95 confidence intervals on simple hazard ratios (which are usually meaningless as one-unit changes are seldom relevant and most models contain multiple terms per predictor)
coefs	if to the table of model coefficients, standard errors, etc. default(TRUE)
...	optional parameters passed to raw pandoc.table function

---

pander.CrossTable	<i>Pander method for CrossTable class</i>
-------------------	---

---

**Description**

Prints a CrossTable object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'CrossTable'
pander(
  x,
  caption = attr(x, "caption"),
  digits = panderOptions("digits"),
  total.r = x$total.r,
  total.c = x$total.c,
  ...
)
```

**Arguments**

x	a CrossTable object
caption	caption (string) to be shown under the table
digits	number of digits of precision
total.r	if to print row totals. Default values is taken from CrossTable object
total.c	if to print column totals. Default values is taken from CrossTable object
...	optional parameters passed to raw pandoc.table function

---

pander.data.frame      *Pander method for data.frame class*

---

**Description**

Prints a data.frame object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'data.frame'
pander(x, caption = attr(x, "caption"), ...)
```

**Arguments**

x	a data.frame object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.data.table      *Pander method for data.table class*

---

**Description**

Prints a data.table object in Pandoc's markdown. Data.tables drop attributes (like row names) when called.

**Usage**

```
## S3 method for class 'data.table'
pander(x, caption = attr(x, "caption"), keys.as.row.names = TRUE, ...)
```

**Arguments**

x	a data.table object
caption	caption (string) to be shown under the table
keys.as.row.names	controls whether to use data.table key as row names when calling pandoc.table
...	optional parameters passed to raw pandoc.table function

---

pander.Date	<i>Pander method for Date class</i>
-------------	-------------------------------------

---

**Description**

Prints a Date object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'Date'  
pander(x, ...)
```

**Arguments**

x	a Date object
...	optional parameters passed to raw pandoc.date function

---

pander.default	<i>Default Pander method</i>
----------------	------------------------------

---

**Description**

Method to be used, when no exact S3 method for given object is found. Tries to render object as a list

**Usage**

```
## Default S3 method:  
pander(x, ...)
```

**Arguments**

x	an object
...	optional parameters passed to raw pandoc.list function

---

pander.density      *Pander method for density class*

---

**Description**

Prints a density object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'density'
pander(x, caption = attr(x, "caption"), ...)
```

**Arguments**

x	a density object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.describe      *Pander method for describe class*

---

**Description**

Prints a describe object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'describe'
pander(x, caption = attr(x, "caption"), digits = panderOptions("digits"), ...)
```

**Arguments**

x	an describe object
caption	caption (string) to be shown under the table
digits	number of digits of precision
...	optional parameters passed to raw pandoc.table function

---

pander.ets	<i>Prints an ets object from forecast package in Pandoc's markdown.</i>
------------	---

---

**Description**

Prints an ets object from forecast package in Pandoc's markdown.

**Usage**

```
## S3 method for class 'ets'  
pander(x, digits = panderOptions("digits"), ...)
```

**Arguments**

x	an ets object
digits	number of digits of precision
...	optional parameters passed to raw pandoc.table function

---

pander.ets	<i>Pander method for ets class</i>
------------	------------------------------------

---

**Description**

Prints a ets object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'ets'  
pander(x, ...)
```

**Arguments**

x	a ets object
...	ignored parameters



---

pander.factor                      *Pander method for factor class*

---

### Description

Prints a factor object in Pandoc's markdown.

### Usage

```
## S3 method for class 'factor'
pander(x, ...)
```

### Arguments

x	a factor object
...	ignored parameters

---

pander.formula                      *Pander method for formula class*

---

### Description

Prints a formula object in Pandoc's markdown.

### Usage

```
## S3 method for class 'formula'
pander(x, max.width = 80, caption = attr(x, "caption"), ...)
```

### Arguments

x	a formula object
max.width	maximum width in characters per line
caption	caption (string) to be shown under the formula
...	optional parameters passed to raw pandoc.formula function

---

`pander.ftable`                    *Pander method for ftable class*

---

**Description**

Prints a ftable object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'ftable'
pander(x, ...)
```

**Arguments**

`x`                                a ftable object  
`...`                            optional parameters passed to `raw_pandoc.table` function

---

`pander.function`                *Pander method for function class*

---

**Description**

Prints an function object in Pandoc's markdown.

**Usage**

```
## S3 method for class '`function`'
pander(x, add.name = FALSE, verbatim = TRUE, syntax.highlighting = FALSE, ...)
```

**Arguments**

`x`                                an function object  
`add.name`                        (default:FALSE) if to add function name to output or just to print a body  
`verbatim`                        (default:TRUE) if to add tabulation, so pandoc conversion will render it properly  
`syntax.highlighting`  
                                   (default:FALSE) if to add highlighting tag for R syntax  
`...`                            ignored parameters

---

pander.Glm                      *Prints an Grm object from rms package in Pandoc's markdown.*

---

### Description

Prints an Grm object from rms package in Pandoc's markdown.

### Usage

```
## S3 method for class 'Glm'
pander(x, coefs = TRUE, ...)
```

### Arguments

x	an Grm object
coefs	if to the table of model coefficients, standard errors, etc. default(TRUE)
...	optional parameters passed to raw pandoc.table function

---

pander.glm                      *Pander method for summary.glm class*

---

### Description

Prints a summary.glm object in Pandoc's markdown.

### Usage

```
## S3 method for class 'glm'
pander(x, caption = attr(x, "caption"), ...)
```

### Arguments

x	a summary.glm object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.gtable	<i>Pander method for gtable class</i>
---------------	---------------------------------------

---

**Description**

Renders an gtable object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'gtable'  
pander(x, zsort = FALSE, ...)
```

**Arguments**

x	an gtable object
zsort	Sort by z values? Default FALSE
...	optional parameters passed to raw pandoc.table function

---

pander.htest	<i>Pander method for htest class</i>
--------------	--------------------------------------

---

**Description**

Prints a htest object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'htest'  
pander(x, caption = attr(x, "caption"), ...)
```

**Arguments**

x	a htest object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.image	<i>Pander method for image class</i>
--------------	--------------------------------------

---

**Description**

Prints a image object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'image'
pander(x, caption = attr(x, "caption"), href = attr(x, "href"), ...)
```

**Arguments**

x	a image object
caption	caption (string) to be shown under the table
href	link that image should be linked with
...	ignored parameters

---

pander.irts	<i>Prints an irts object from tseries package in Pandoc's markdown.</i>
-------------	---

---

**Description**

Prints an irts object from tseries package in Pandoc's markdown.

**Usage**

```
## S3 method for class 'irts'
pander(x, caption = attr(x, "caption"), format = panderOptions("date"), ...)
```

**Arguments**

x	an irts object
caption	caption (string) to be shown under the table
format	string passed to format when printing dates (POSIXct or POSIXt)
...	optional parameters passed to raw pandoc.table function

---

pander.list                      *Pander method for list class*

---

### Description

Prints a list object in Pandoc's markdown.

### Usage

```
## S3 method for class 'list'
pander(x, ...)
```

### Arguments

x	a list object
...	ignored parameters

---

pander.lm                      *Pander method for summary.lm class*

---

### Description

Prints a summary.lm object in Pandoc's markdown.

### Usage

```
## S3 method for class 'lm'
pander(x, caption = attr(x, "caption"), covariate.labels, omit, ...)
```

### Arguments

x	a summary.glm object
caption	caption (string) to be shown under the table
covariate.labels	vector to replace covariate labels in the table
omit	vector of variable to omit for printing in resulting table
...	optional parameters passed to raw pandoc.table function

---

pander.lme	<i>Pander method for lme class</i>
------------	------------------------------------

---

**Description**

Prints a lme object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'lme'  
pander(x, caption = attr(x, "caption"), ...)
```

**Arguments**

x	a lme object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.logical	<i>Pander method for logical class</i>
----------------	--

---

**Description**

Prints a logical object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'logical'  
pander(x, ...)
```

**Arguments**

x	a logical object
...	ignored parameters

---

pander.lrm	<i>Prints an lrm object from rms package in Pandoc's markdown.</i>
------------	--

---

### Description

Prints an lrm object from rms package in Pandoc's markdown.

### Usage

```
## S3 method for class 'lrm'
pander(x, coefs = TRUE, ...)
```

### Arguments

x	an lrm object
coefs	if to the table of model coefficients, standard errors, etc. default(TRUE)
...	optional parameters passed to raw pandoc.table function

---

pander.manova	<i>Pander method for manova class</i>
---------------	---------------------------------------

---

### Description

Prints an manova object in Pandoc's markdown.

### Usage

```
## S3 method for class 'manova'
pander(x, caption = attr(x, "caption"), add.significance.stars = FALSE, ...)
```

### Arguments

x	an manovv object
caption	caption (string) to be shown under the table
add.significance.stars	if significance stars should be shown for P value
...	optional parameters passed to raw pandoc.table function



---

pander.matrix      *Pander method for matrix class*

---

**Description**

Prints a matrix object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'matrix'  
pander(x, caption = attr(x, "caption"), ...)
```

**Arguments**

x	a matrix object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.microbenchmark      *Pander method for microbenchmark class*

---

**Description**

Prints an microbenchmark object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'microbenchmark'  
pander(x, caption = attr(x, "caption"), expr.labels, unit, ...)
```

**Arguments**

x	an microbenchmark object
caption	caption (string) to be shown under the table
expr.labels	expression labels that will replace default ones (similar to rownames, which microbenchmark class table does not have)
unit	units in which values should be printed (for example second, microseconds, etc.). Should be one of ns, us, ms, s, t, hz, khz, mhz, eps, f
...	optional parameters passed to raw pandoc.table function

---

pander.name	<i>Pander method for name class</i>
-------------	-------------------------------------

---

**Description**

Prints a call object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'name'
pander(x, ...)
```

**Arguments**

x	a name language object
...	ignored parameters

---

pander.nls	<i>Prints an nls object from stats package in Pandoc's markdown.</i>
------------	--

---

**Description**

Prints an nls object from stats package in Pandoc's markdown.

**Usage**

```
## S3 method for class 'nls'
pander(x, digits = panderOptions("digits"), show.convergence = FALSE, ...)
```

**Arguments**

x	an nls object
digits	number of digits of precision
show.convergence	(default:FALSE) if to print convergence info
...	optional parameters passed to raw pandoc.table function

---

pander.NULL	<i>Pander method for a NULL object</i>
-------------	--

---

**Description**

Prints a NULL object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'NULL'  
pander(x, ...)
```

**Arguments**

x	a NULL object
...	ignored parameters

---

pander.numeric	<i>Pander method for numeric class</i>
----------------	--

---

**Description**

Prints a numeric class in Pandoc's markdown.

**Usage**

```
## S3 method for class 'numeric'  
pander(x, ...)
```

**Arguments**

x	a numeric object
...	ignored parameter

---

pander.ols                      *Prints an ols object from rms package in Pandoc's markdown.*

---

### Description

Prints an ols object from rms package in Pandoc's markdown.

### Usage

```
## S3 method for class 'ols'
pander(
  x,
  long = FALSE,
  coefs = TRUE,
  digits = panderOptions("digits"),
  round = panderOptions("round"),
  ...
)
```

### Arguments

x	an ols object
long	if to print the correlation matrix of parameter estimates. default(FALSE)
coefs	if to the table of model coefficients, standard errors, etc. default(TRUE)
digits	passed to format. Can be a vector specifying values for each column (has to be the same length as number of columns).
round	passed to round. Can be a vector specifying values for each column (has to be the same length as number of columns). Values for non-numeric columns will be disregarded.
...	optional parameters passed to raw pandoc.table function

---

pander.orm                      *Prints an orm object from rms package in Pandoc's markdown.*

---

### Description

Prints an orm object from rms package in Pandoc's markdown.

### Usage

```
## S3 method for class 'orm'
pander(x, coefs = TRUE, intercepts = x$non.slopes < 10, ...)
```

**Arguments**

x	an orm object
coefs	if to the table of model coefficients, standard errors, etc. default(TRUE)
intercepts	if to print intercepts, by default, intercepts are only printed if there are fewer than 10 of them
...	optional parameters passed to raw pandoc.table function

---

pander.polr                    *Prints an polr object from MASS package in Pandoc's markdown.*

---

**Description**

Prints an polr object from MASS package in Pandoc's markdown.

**Usage**

```
## S3 method for class 'polr'
pander(x, ...)
```

**Arguments**

x	an polr object
...	optional parameters passed to raw pandoc.table function

---

pander.POSIXct                *Pander method for POSIXct class*

---

**Description**

Prints a POSIXct object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'POSIXct'
pander(x, ...)
```

**Arguments**

x	a POSIXct object
...	optional parameters passed to raw pandoc.date function

---

pander.POSIXlt      *Pander method for POSIXlt class*

---

### Description

Prints a POSIXlt object in Pandoc's markdown.

### Usage

```
## S3 method for class 'POSIXlt'
pander(x, ...)
```

### Arguments

x                    a POSIXlt object  
 ...                  optional parameters passed to raw pandoc.date function

---

pander.prcomp      *Pander method for prcomp class*

---

### Description

Prints a prcomp object in Pandoc's markdown.

### Usage

```
## S3 method for class 'prcomp'
pander(x, caption = attr(x, "caption"), ...)
```

### Arguments

x                    a prcomp object  
 caption             caption (string) to be shown under the table  
 ...                  optional parameters passed to raw pandoc.table function

---

pander.randomForest     *Pander method for randomForest class*

---

### Description

Renders an randomForest object in Pandoc's markdown.

### Usage

```
## S3 method for class 'randomForest'  
pander(x, digits = panderOptions("digits"), ...)
```

### Arguments

x	an randomForest object
digits	number of digits of precision
...	optional parameters passed to raw pandoc.table function

---

pander.rapport     *Pander method for rapport class*

---

### Description

Prints a rapport object in Pandoc's markdown.

### Usage

```
## S3 method for class 'rapport'  
pander(x, ...)
```

### Arguments

x	a rapport object
...	ignored parameters

---

pander.rlm                    *Pander method for rlm class*

---

### Description

Prints an rlm object in Pandoc's markdown.

### Usage

```
## S3 method for class 'rlm'  
pander(x, caption = attr(x, "caption"), ...)
```

### Arguments

x	an rlm object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.sessionInfo        *Pander method for sessionInfo class*

---

### Description

Prints an sessionInfo object in Pandoc's markdown.

### Usage

```
## S3 method for class 'sessionInfo'  
pander(x, locale = TRUE, compact = TRUE, ...)
```

### Arguments

x	an sessionInfo object
locale	(default:TRUE) if to print locale output
compact	(default:TRUE) if output should be compact (ommiting extra line breaks and spaces, inline printing of lists)
...	ignored parameters



---

pander.smooth.spline *Pander method for smooth.spline class*

---

### Description

Prints an smooth.spline object in Pandoc's markdown.

### Usage

```
## S3 method for class 'smooth.spline'  
pander(x, ...)
```

### Arguments

x	an smooth.spline object
...	ignored parameters

---

pander.stat.table *Pander method for stat.table class*

---

### Description

Prints an stat.table object in Pandoc's markdown.

### Usage

```
## S3 method for class 'stat.table'  
pander(x, caption = attr(x, "caption"), ...)
```

### Arguments

x	an stat.table object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.summary.aov      *Pander method for summary.aov class*

---

### Description

Prints a summary.aov object in Pandoc's markdown.

### Usage

```
## S3 method for class 'summary.aov'
pander(x, caption = attr(x, "caption"), ...)
```

### Arguments

x	a summary.aov object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.summary.aovlist  
*Pander method for summary.aovlist class*

---

### Description

Prints a summary.aovlist object in Pandoc's markdown.

### Usage

```
## S3 method for class 'summary.aovlist'
pander(x, caption = attr(x, "caption"), ...)
```

### Arguments

x	a summary.aovlist object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.summary.glm      *Pander method for summary.glm class*

---

### Description

Prints a summary.glm object in Pandoc's markdown.

### Usage

```
## S3 method for class 'summary.glm'
pander(
  x,
  caption = attr(x, "caption"),
  covariate.labels,
  omit,
  summary = TRUE,
  ...
)
```

### Arguments

x	an summary.glm object
caption	caption (string) to be shown under the table
covariate.labels	vector to replace covariate lables in the table
omit	vector of variable to omit for priting in resulting table
summary	(default:TRUE) if used for summary.lm or lm
...	optional parameters passed to special methods and/or raw pandoc.* functions

### Value

By default this function outputs (see: cat) the result. If you would want to catch the result instead, then call the function ending in .return.

---

pander.summary.lm      *Pander method for summary.lm class*

---

### Description

Prints a summary.lm object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'summary.lm'
pander(
  x,
  caption = attr(x, "caption"),
  covariate.labels,
  omit,
  summary = TRUE,
  add.significance.stars = FALSE,
  move.intercept = FALSE,
  ...
)
```

**Arguments**

<code>x</code>	an <code>summary.lm</code> object
<code>caption</code>	caption (string) to be shown under the table
<code>covariate.labels</code>	vector to replace covariate labels in the table
<code>omit</code>	vector of variable to omit for printing in resulting table
<code>summary</code>	(default:TRUE) if used for <code>summary.lm</code> or <code>lm</code>
<code>add.significance.stars</code>	if significance stars should be shown for P value
<code>move.intercept</code>	by default, the Intercept is the first coefficient in the table, which can be moved to the bottom of the table
<code>...</code>	optional parameters passed to special methods and/or raw <code>pandoc.*</code> functions

**Value**

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

---

`pander.summary.lme`      *Pander method for summary.lme class*

---

**Description**

Prints a `lme` object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'summary.lme'
pander(x, caption = attr(x, "caption"), summary = TRUE, ...)
```

**Arguments**

x	a lme object
caption	caption (string) to be shown under the table
summary	(default:TRUE) if to print expender summary
...	optional parameters passed to raw pandoc.table function

---

pander.summary.manova *Prints an summary.manova object from stats package in Pandoc's markdown.*

---

**Description**

Prints an summary.manova object from stats package in Pandoc's markdown.

**Usage**

```
## S3 method for class 'summary.manova'
pander(x, caption = attr(x, "caption"), add.significance.stars = FALSE, ...)
```

**Arguments**

x	an summary.manova object
caption	caption (string) to be shown under the table
add.significance.stars	if significance stars should be shown for P value
...	optional parameters passed to raw pandoc.table function

---

pander.summary.nls *Prints an summary.nls object from stats package in Pandoc's markdown.*

---

**Description**

Prints an summary.nls object from stats package in Pandoc's markdown.

**Usage**

```
## S3 method for class 'summary.nls'
pander(
  x,
  summary = TRUE,
  add.significance.stars = FALSE,
  digits = panderOptions("digits"),
  show.convergence = FALSE,
  ...
)
```

**Arguments**

x	an summary.nls object
summary	(default:TRUE) if used for summary.lm or lm
add.significance.stars	if significance stars should be shown for P value
digits	number of digits of precision
show.convergence	(default:FALSE) if to print convergence info
...	optional parameters passed to raw pandoc.table function

---

pander.summary.polr *Prints an summary.polr object from MASS package in Pandoc's markdown.*

---

**Description**

Prints an summary.polr object from MASS package in Pandoc's markdown.

**Usage**

```
## S3 method for class 'summary.polr'
pander(
  x,
  digits = panderOptions("digits"),
  round = panderOptions("round"),
  keep.trailing.zeros = panderOptions("keep.trailing.zeros"),
  ...
)
```

**Arguments**

x	an summary.polr object
digits	number of digits of precision passed to format
round	number of rounding digits passed to round
keep.trailing.zeros	to show or remove trailing zeros in numbers on a column basis width
...	optional parameters passed to raw pandoc.table function

---

pander.summary.prcomp *Pander method for summary.prcomp class*

---

### Description

Prints a summary.prcomp object in Pandoc's markdown.

### Usage

```
## S3 method for class 'summary.prcomp'  
pander(x, caption = attr(x, "caption"), summary = TRUE, ...)
```

### Arguments

x	a summary.prcomp object
caption	caption (string) to be shown under the table
summary	(default:TRUE) if extended summary should be printed
...	optional parameters passed to raw pandoc.table function

---

pander.summary.rms *Prints an summary.rms from rms package in Pandoc's markdown.*

---

### Description

Prints an summary.rms from rms package in Pandoc's markdown.

### Usage

```
## S3 method for class 'summary.rms'  
pander(x, ...)
```

### Arguments

x	an summary.rms object
...	optional parameters passed to raw pandoc.table function

---

`pander.summary.survreg`

*Prints an survreg object from survival package in Pandoc's markdown.*

---

### Description

Prints an survreg object from survival package in Pandoc's markdown.

### Usage

```
## S3 method for class 'summary.survreg'
pander(
  x,
  summary = TRUE,
  digits = panderOptions("digits"),
  round = panderOptions("round"),
  keep.trailing.zeros = panderOptions("keep.trailing.zeros"),
  ...
)
```

### Arguments

<code>x</code>	an survreg object
<code>summary</code>	if summary should be printed
<code>digits</code>	number of digits of precision passed to format
<code>round</code>	number of rounding digits passed to round
<code>keep.trailing.zeros</code>	to show or remove trailing zeros in numbers on a column basis width
<code>...</code>	optional parameters passed to raw <code>pander.table</code> function

---

`pander.summary.table` *Pander method for summary.table class*

---

### Description

Renders an summary.table object in Pandoc's markdown.

### Usage

```
## S3 method for class 'summary.table'
pander(x, caption = attr(x, "caption"), print.call = T, ...)
```



**Arguments**

x	an function object
caption	caption (string) to be shown under the table
print.call	(default:TRUE) if call should be printed
...	optional parameters passed to raw pandoc.table function

---

pander.survdiff	<i>Pander method for survdiff class</i>
-----------------	---

---

**Description**

Prints an survdiff object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'survdiff'
pander(x, caption = attr(x, "caption"), ...)
```

**Arguments**

x	an survdiff object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.survfit	<i>Pander method for survfit class</i>
----------------	--

---

**Description**

Prints an survfit object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'survfit'
pander(
  x,
  caption = attr(x, "caption"),
  scale = 1,
  print.rmean = getOption("survfit.print.rmean"),
  rmean = getOption("survfit.rmean"),
  ...
)
```

**Arguments**

x	the result of a call to the survfit function.
caption	caption (string) to be shown under the table
scale	a numeric value to rescale the survival time, e.g., if the input data to survfit were in days, scale=365 would scale the printout to years.
print.rmean, rmean	options for computation and display of the restricted mean
...	optional parameters passed to raw pandoc.table function

---

pander.survreg      *Prints an survreg object from survival package in Pandoc's markdown.*

---

**Description**

Prints an survreg object from survival package in Pandoc's markdown.

**Usage**

```
## S3 method for class 'survreg'
pander(x, ...)
```

**Arguments**

x	an survreg object
...	optional parameters passed to raw pandoc.table function

---

pander.table      *Pander method for table class*

---

**Description**

Prints a table object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'table'
pander(x, caption = attr(x, "caption"), ...)
```

**Arguments**

x	a table object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.tabular                    *Pander method for tabular class*

---

### Description

Renders an tabular object in Pandoc's markdown.

### Usage

```
## S3 method for class 'tabular'
pander(
  x,
  caption = attr(x, "caption"),
  emphasize.rownames = TRUE,
  digits = panderOptions("digits"),
  ...
)
```

### Arguments

x	an function object
caption	caption (string) to be shown under the table
emphasize.rownames	(default:TRUE) if rownames should be highlighted
digits	number of digits of precision
...	optional parameters passed to raw pandoc.table function

---

pander.ts                         *Pander method for timeseries class*

---

### Description

Prints a timeseries object in Pandoc's markdown.

### Usage

```
## S3 method for class 'ts'
pander(x, caption = attr(x, "caption"), ...)
```

### Arguments

x	a timeseries object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

pander.zoo	<i>Pander method for zoo class</i>
------------	------------------------------------

---

**Description**

Prints a zoo object in Pandoc's markdown.

**Usage**

```
## S3 method for class 'zoo'
pander(x, caption = attr(x, "caption"), ...)
```

**Arguments**

x	an zoo object
caption	caption (string) to be shown under the table
...	optional parameters passed to raw pandoc.table function

---

panderOptions	<i>Querying/setting pander option</i>
---------------	---------------------------------------

---

**Description**

To list all pander options, just run this function without any parameters provided. To query only one value, pass the first parameter. To set that, use the value parameter too.

**Usage**

```
panderOptions(o, value)
```

**Arguments**

o	option name (string). See below.
value	value to assign (optional)

**Details**

The following pander options are available:

- `digits`: numeric (default: 2) passed to `format`. Can be a vector specifying values for each column (has to be the same length as number of columns). Values for non-numeric columns will be disregarded.
- `decimal.mark`: string (default: `.`) passed to `format`

- `formula.caption.prefix`: string (default: 'Formula: ') passed to `pandoc.formula` to be used as caption prefix. Be sure about what you are doing if changing to other than 'Formula: ' or ': '.
- `big.mark`: string (default: ") passed to `format`.
- `round`: numeric (default: Inf) passed to `round`. Can be a vector specifying values for each column (has to be the same length as number of columns). Values for non-numeric columns will be disregarded.
- `keep.trailing.zeros`: boolean (default: FALSE) to show or remove trailing zeros in numbers
- `keep.line.breaks`: boolean (default: FALSE) to keep or remove line breaks from cells in a table
- `missing`: string (default: NA) to replace missing values in vectors, tables etc.
- `date`: string (default: '%Y/%m/%d %X') passed to `format` when printing dates (POSIXct or POSIXt)
- `header.style`: 'atx' or 'setext' passed to `pandoc.header`
- `list.style`: 'bullet', 'ordered' or 'roman' passed to `pandoc.list`. Please note that this has no effect on pander methods.
- `table.style`: 'multiline', 'grid', 'simple' or 'markdown' passed to `pandoc.table`
- `table.emphasize.rownames`: boolean (default: TRUE) if row names should be highlighted
- `table.split.table`: numeric passed to `pandoc.table` and also affects pander methods. This option tells pander where to split too wide tables. The default value (80) suggests the conventional number of characters used in a line, feel free to change (e.g. to Inf to disable this feature) if you are not using a VT100 terminal any more :)
- `table.split.cells`: numeric or numeric vector (default: 30) passed to `pandoc.table` and also affects pander methods. This option tells pander where to split too wide cells with line breaks. Numeric vector specifies values for cells separately. Set Inf to disable.
- `table.caption.prefix`: string (default: 'Table: ') passed to `pandoc.table` to be used as caption prefix. Be sure about what you are doing if changing to other than 'Table: ' or ': '.
- `table.continues`: string (default: 'Table continues below') passed to `pandoc.table` to be used as caption for long (split) without a user defined caption
- `table.continues.affix`: string (default: '(continued below)') passed to `pandoc.table` to be used as an affix concatenated to the user defined caption for long (split) tables
- `table.alignment.default`: string (default: centre) that defines the default alignment of cells. Can be left, right or centre that latter can be also spelled as center.
- `table.alignment.rownames`: string (default: centre) that defines the alignment of rownames in tables. Can be left, right or centre that latter can be also spelled as center.
- `use.hyphening`: boolean (default: FALSE) if try to use hyphening when splitting large cells according to `table.split.cells`. Requires `syll`.
- `evals.messages`: boolean (default: TRUE) passed to `evals` pander method specifying if messages should be rendered
- `p.wrap`: a string (default: '\_ ') to wrap vector elements passed to `p` function
- `p.sep`: a string (default: ', ') with the main separator passed to `p` function
- `p.copula`: a string (default: ' and ') with ending separator passed to `p` function

- `plain.ascii`: boolean (default: FALSE) to define if output should be in plain ascii or not
- `graph.nomargin`: boolean (default: TRUE) if trying to keep plots' margins at minimal
- `graph.fontfamily`: string (default: 'sans') specifying the font family to be used in images. Please note, that using a custom font on Windows requires `grDevices:::windowsFonts` first.
- `graph.fontcolor`: string (default: 'black') specifying the default font color
- `graph.fontsize`: numeric (default: 12) specifying the *base* font size in pixels. Main title is rendered with 1.2 and labels with 0.8 multiplier.
- `graph.grid`: boolean (default: TRUE) if a grid should be added to the plot
- `graph.grid.minor`: boolean (default: TRUE) if a minor grid should be also rendered
- `graph.grid.color`: string (default: 'grey') specifying the color of the rendered grid
- `graph.grid.lty`: string (default: 'dashed') specifying the line type of grid
- `graph.bboxes`: boolean (default: FALSE) if to render a border around of plot (and e.g. around strip)
- `graph.legend.position`: string (default: 'right') specifying the position of the legend: 'top', 'right', 'bottom' or 'left'
- `graph.background`: string (default: 'white') specifying the plots main background's color
- `graph.panel.background`: string (default: 'transparent') specifying the plot's main panel background. Please *note*, that this option is not supported with base graphics.
- `graph.colors`: character vector of default color palette (defaults to a colorblind theme: <https://jfly.uni-koeln.de/color/>). Please *note* that this update work with base plots by appending the `col` argument to the call if not set.
- `graph.color.rnd`: boolean (default: FALSE) specifying if the palette should be reordered randomly before rendering each plot to get colorful images
- `graph.axis.angle`: numeric (default: 1) specifying the angle of axes' labels. The available options are based on `par(las)` and sets if the labels should be:
  - 1: parallel to the axis,
  - 2: horizontal,
  - 3: perpendicular to the axis or
  - 4: vertical.
- `graph.symbol`: numeric (default: 1) specifying a symbol (see the `pch` parameter of `par`)
- `knitr.auto.asis`: boolean (default: TRUE) if the results of `pander` should be considered as 'asis' in `knitr`. Equals to specifying `results='asis'` in the R chunk, so thus there is no need to do so if set to TRUE.
- `pandoc.binary`: full path of `pandoc`'s binary. By default, `pandoc` is in the path.

### See Also

[evalsOptions](#)

**Examples**

```
## Not run:
panderOptions()
panderOptions('digits')
panderOptions('digits', 5)

## End(Not run)
```

---

pander_return	<i>Pander and capture output</i>
---------------	----------------------------------

---

**Description**

This is a wrapper function around pander but instead of printing to stdout, this function returns a character vector of the captured lines.

**Usage**

```
pander_return(...)
```

**Arguments**

```
...          everything passed to pander
```

**See Also**

```
pander
```

---

Pandoc-class	<i>Reporting with Pandoc</i>
--------------	------------------------------

---

**Description**

This R5 reference class can hold bunch of elements (text or R objects) from which it tries to create a Pandoc's markdown text file. Exporting the report to several formats (like: PDF, docx, odt etc. - see Pandoc's documentation) is also possible, see examples below.

**Arguments**

```
...          this is an R5 object without any direct params but it should be documented,
              right?
```

**Methods**

```
export(Class) Returns the result of coercing the object to Class. No effect on the object itself.
```

## Examples

```
## Not run:
## Initialize a new Pandoc object
myReport <- Pandoc$new()

## Add author, title and date of document
myReport$author <- 'Anonymous'
myReport$title <- 'Demo'

## Or it could be done while initializing
myReport <- Pandoc$new('Anonymous', 'Demo')

## Add some free text
myReport$add.paragraph('Hello there, this is a really short tutorial!')

## Add maybe a header for later stuff
myReport$add.paragraph('# Showing some raw R objects below')

## Adding a short matrix
myReport$add(matrix(5,5,5))

## Or a table with even # TODO: caption
myReport$add.paragraph('Hello table:')
myReport$add(table(mtcars$am, mtcars$gear))

## Or a "large" data frame which barely fits on a page
myReport$add(mtcars)

## And a simple linear model with Anova tables
m1 <- with(lm(mpg ~ hp + wt), data = mtcars)
myReport$add(m1)
myReport$add(anova(m1))
myReport$add(aov(m1))

## And do some principal component analysis at last
myReport$add(prcomp(USArrests))

## Sorry, I did not show how Pandoc deals with plots:
myReport$add(plot(1:10)) # TODO: caption

## Want to see the report? Just print it:
myReport

## Exporting to PDF (default)
myReport$export()

## Or to docx in tempdir:
myReport$format <- 'docx'
myReport$export(tempfile())

## You do not want to see the generated report after generation?
myReport$export(open = FALSE)
```



```
## End(Not run)
```

---

Pandoc.brew

*Brew in pandoc format*

---

## Description

This function behaves just like `brew` except for the `<%= . . %>` tags, where `Pandoc.brew` first translate the R object found between the tags to Pandoc's markdown before passing to the `cat` function.

## Usage

```
Pandoc.brew(
  file = stdin(),
  output = stdout(),
  convert = FALSE,
  open = TRUE,
  graph.name,
  graph.dir,
  graph.hi.res = FALSE,
  text = NULL,
  envir = parent.frame(),
  append = FALSE,
  ...
)
```

## Arguments

<code>file</code>	file path of the brew template. As this is passed to <code>readLines</code> , <code>file</code> could be an URL too, but not over SSL (for that latter <code>Rcurl</code> would be needed).
<code>output</code>	(optional) file path of the output file
<code>convert</code>	string: format of required output document (besides Pandoc's markdown). Pandoc is called if set via <code>Pandoc.convert</code> and the converted document could be also opened automatically (see below).
<code>open</code>	try to open converted document with operating system's default program
<code>graph.name</code>	character string (default to <code>%t</code> when <code>output</code> is set to <code>stdout</code> and <code>paste0(basename(output), '-%n')</code> otherwise) passed to <code>evals</code> . Besides <code>evals</code> 's possible tags <code>%i</code> is also available which would be replaced by the chunk number (and optionally an integer which would handle nested brew calls) and <code>%I</code> with the order of the current expression.
<code>graph.dir</code>	character string (default to <code>tempdir()</code> when <code>output</code> is set to <code>stdout</code> and <code>dirname(graph.name)</code> otherwise) passed to <code>evals</code>
<code>graph.hi.res</code>	render high resolution images of plots? Default is <code>FALSE</code> except for HTML output.
<code>text</code>	character vector (treated as the content of the file)

envir	environment where to brew the template
append	should append or rather overwrite (default) the output markdown text file? Please note that this option only affects the markdown file and not the optionally created other formats.
...	additional parameters passed to <a href="#">Pandoc.convert</a>

## Details

This parser tries to be smart in some ways:

- a block (R commands between the tags) could return any value at any part of the block and there are no restrictions about the number of returned R objects
- plots and images are grabbed in the document, rendered to a png file and pander method would result in a Pandoc's markdown formatted image link (so the image would be shown/included in the exported document). The images are put in plots directory in current getwd() or to the specified output file's directory.
- all warnings/messages and errors are recorded in the blocks and returned in the document as a footnote

Please see my Github page for details (<https://rapporter.github.io/pander/#brew-to-pandoc>) and examples (<https://rapporter.github.io/pander/#examples>).

## Value

converted file name with full path if convert is set, none otherwise

## Note

Only one of the input parameters (file or text) is to be used at once!

## References

- Jeffrey Horner (2011). `_brew: Templating Framework for Report Generation.` <https://cran.r-project.org/package=brew>
- John MacFarlane (2012): `_Pandoc User's Guide.` <https://johnmacfarlane.net/pandoc/README.html>

## Examples

```
## Not run:
text <- paste('# Header', '',
  'What a lovely list:\n<%=as.list(runif(10))%>',
  'A wide table:\n<%=mtcars[1:3, ]%>',
  'And a nice chart:\n\n<%=plot(1:10)%>', sep = '\n')
Pandoc.brew(text = text)
Pandoc.brew(text = text, output = tempfile(), convert = 'html')
Pandoc.brew(text = text, output = tempfile(), convert = 'pdf')

## pi is awesome
```

```

Pandoc.brew(text='<%for (i in 1:5) {%>\n Pi has a lot (<%=i%>) of power: <%=pi^i%><%}>')

## package bundled examples
Pandoc.brew(system.file('examples/minimal.brew', package='pander'))
Pandoc.brew(system.file('examples/minimal.brew', package='pander'),
  output = tempfile(), convert = 'html')
Pandoc.brew(system.file('examples/short-code-long-report.brew', package='pander'))
Pandoc.brew(system.file('examples/short-code-long-report.brew', package='pander'),
  output = tempfile(), convert = 'html')

## brew returning R objects
str(Pandoc.brew(text='Pi equals to <%=pi%>.
And here are some random data:\n<%=runif(10)%>'))

str(Pandoc.brew(text='# Header <%=1%>\nPi is <%=pi%> which is smaller then <%=2%>.
foo\nbar\n <%=3%>\n<%=mtcars[1:2,]%>'))

str(Pandoc.brew(text='<%for (i in 1:5) {%>
Pi has a lot (<%=i%>) of power: <%=pi^i%><%}>'))

## End(Not run)

```

---

Pandoc.convert

*Converts Pandoc to other format*


---

## Description

Calling John MacFarlane's great program to convert specified file (see `f` parameter below) or character vector see `text` parameter to other formats like HTML, pdf, docx, odt etc.

## Usage

```

Pandoc.convert(
  f,
  text,
  format = "html",
  open = TRUE,
  options = "",
  footer = FALSE,
  proc.time,
  portable.html = TRUE,
  pandoc.binary = panderOptions("pandoc.binary")
)

```

## Arguments

`f` Pandoc's markdown format file path. If URL is provided then the generated file's path is `tempfile()` but please bear in mind that this way only images with absolute path would shown up in the document.

text	Pandoc's markdown format character vector. Treated as the content of f file - so the f parameter is ignored. The generated file's path is tempfile().
format	required output format. For all possible values here check out Pandoc homepage: <a href="https://johnmacfarlane.net/pandoc/">https://johnmacfarlane.net/pandoc/</a>
open	try to open converted document with operating system's default program
options	optionally passed arguments to Pandoc (instead of pander's default)
footer	add footer to document with meta-information
proc.time	optionally passed number in seconds which would be shown in the generated document's footer
portable.html	instead of using local files, rather linking JS/CSS files to an online CDN for portability and including base64-encoded images if converting to HTML without custom options
pandoc.binary	custom path to pandoc's binary if not found in the path or not set in the RSTUDIO_PANDOC env var

**Value**

Converted file's path.

**Note**

This function depends on Pandoc which should be pre-installed on user's machine. See the INSTALL file of the package.

**References**

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

**Examples**

```
## Not run:
Pandoc.convert(text = c('# Demo', 'with a paragraph'))
Pandoc.convert('https://rapporter.github.io/pander/minimal.md')
# Note: the generated HTML is not showing images with relative path from the above file.
# Based on that `pdf`, `docx` etc. formats would not work! If you want to convert an
# online markdown file to other formats with this function, please pre-process the file
# to have absolute paths instead.

## End(Not run)
```

---

pandoc.date.return     *Dates*

---

### Description

Pandoc's markdown date.

### Usage

```
pandoc.date.return(x, inline = TRUE, simplified = FALSE, ...)
```

### Arguments

x	date or vector of dates
inline	if to render vector of dates as inline paragraph or not (as list)
simplified	if just add date formatting to vector of dates
...	extra arguments passed by from parent call, disregarded

### Value

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

### Examples

```
pandoc.date(Sys.Date())  
pandoc.date(Sys.Date() - 1:10)  
pandoc.date(Sys.Date() - 1:10, inline = FALSE)
```

---

pandoc.emphasis.return  
                          *Emphasis*

---

### Description

Pandoc's markdown emphasis format (e.g. `*FOO*`) is added to character string.

### Usage

```
pandoc.emphasis.return(x)
```

### Arguments

x	character vector
---	------------------

**Value**

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

**References**

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

**See Also**

[pandoc.strong](#) [pandoc.strikeout](#) [pandoc.verbatim](#)

**Examples**

```
pandoc.emphasis('F00')
pandoc.emphasis(c('F00', '*F00*'))
pandoc.emphasis.return('F00')
```

---

```
pandoc.footnote.return
```

*Footnote*

---

**Description**

Creates a Pandoc's markdown format footnote.

**Usage**

```
pandoc.footnote.return(x)
```

**Arguments**

x	character vector
---	------------------

**Value**

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

**References**

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

**Examples**

```
pandoc.footnote('Automatically numbered footnote, right?')
```

---

pandoc.formula.return *Formulas*

---

## Description

Pandoc's markdown formula.

## Usage

```
pandoc.formula.return(  
  x,  
  text = NULL,  
  max.width = 80,  
  caption,  
  add.line.breaks = FALSE,  
  ...  
)
```

## Arguments

x	formula
text	text to be written before result in the same line. Typically used by calls from other functions in the package
max.width	maximum width in characters per line
caption	caption (string) to be shown under the formula
add.line.breaks	if to add 2 line breaks after formula
...	extra arguments passed by from parent call, disregarded

## Value

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

## Examples

```
pandoc.formula(y ~ x)  
pandoc.formula(formula(paste('y ~ ', paste0('x', 1:12, collapse = ' + '))))
```

pandoc.header.return *Create header*

---

### Description

Creates a (Pandoc's) markdown style header with given level.

### Usage

```
pandoc.header.return(x, level = 1, style = c("atx", "setext"))
```

### Arguments

x	character vector
level	integer
style	atx or setext type of heading

### Value

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

### References

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

### Examples

```
pandoc.header('Foo!', 4)
pandoc.header('Foo!', 2, 'setext')
pandoc.header('Foo **bar**!', 1, 'setext')
```

---

pandoc.horizontal.rule.return  
*Create horizontal rule*

---

### Description

Creates a Pandoc's markdown format horizontal line with trailing and leading newlines.

### Usage

```
pandoc.horizontal.rule.return()
```



**Value**

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

**References**

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

---

`pandoc.image.return`    *Create pandoc image tags*

---

**Description**

Creates a Pandoc's markdown format image hyperlink.

**Usage**

```
pandoc.image.return(img, caption = storage$caption)
```

**Arguments**

<code>img</code>	image path
<code>caption</code>	text

**Value**

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

**Note**

The caption text is read from an internal buffer which defaults to NULL. To update that, call `link{set.caption}` before.

**References**

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

**See Also**

[set.caption](#)

**Examples**

```
pandoc.image('foo.png')
pandoc.image('foo.png', 'Nice image, huh?')
```

---

`pandoc.indent`      *Indent text*

---

**Description**

Indent all (optionally concatenated) lines of provided text with given level.

**Usage**

```
pandoc.indent(x, level = 0)
```

**Arguments**

<code>x</code>	character vector
<code>level</code>	integer

**Examples**

```
pandoc.indent('FOO', 1)
pandoc.indent(pandoc.table.return(table(mtcars$gear)), 2)
cat(pandoc.indent(pandoc.table.return(table(mtcars$gear)), 3))
```

---

`pandoc.link.return`      *Create pandoc link Pandoc's markdown format link.*

---

**Description**

Create pandoc link Pandoc's markdown format link.

**Usage**

```
pandoc.link.return(url, text = url)
```

**Arguments**

<code>url</code>	hyperlink
<code>text</code>	link text

**Value**

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

**References**

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

## Examples

```
pandoc.link('https://www.r-project.org/')
pandoc.link('https://www.r-project.org/', 'R')
```

---

pandoc.list.return     *Create a list*

---

## Description

Creates a Pandoc's markdown format list from provided character vector/list.

## Usage

```
pandoc.list.return(
  elements,
  style = c("bullet", "ordered", "roman"),
  loose = FALSE,
  add.line.breaks = TRUE,
  add.end.of.list = TRUE,
  indent.level = 0,
  missing = panderoptions("missing"),
  ...
)
```

## Arguments

elements	character vector of strings
style	the required style of the list
loose	adding a newline between elements
add.line.breaks	adding a leading and trailing newline before/after the list
add.end.of.list	adding a separator comment after the list
indent.level	the level of indent
missing	string to replace missing values
...	extra arguments passed by from parent call, disregarded

## Value

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

## References

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

**Examples**

```
## basic lists
pandoc.list(letters[1:5])
pandoc.list(letters[1:5])
pandoc.list(letters[1:5], 'ordered')
pandoc.list(letters[1:5], 'roman')
pandoc.list(letters[1:5], loose = TRUE)

## nested lists
l <- list("First list element",
  rep.int('sub element', 5),
  "Second element",
  list('F', 'B', 'I', c('phone', 'pad', 'talics')))
pandoc.list(l)
pandoc.list(l, loose = TRUE)
pandoc.list(l, 'roman')

## complex nested lists
pandoc.list(list('one', as.list(2)))
pandoc.list(list('one', list('two')))
pandoc.list(list('one', list(2:3)))
```

---

pandoc.p.return

*Paragraphs*


---

**Description**

Pandoc's markdown paragraph.

**Usage**

```
pandoc.p.return(x)
```

**Arguments**

x                    character vector

**Value**

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

**References**

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

**See Also**

[pandoc.emphasis](#) [pandoc.strikeout](#) [pandoc.verbatim](#)

### Examples

```
pandoc.p('F00')  
pandoc.p(c('Lorem', 'ipsum', 'lorem ipsum'))
```

---

```
pandoc.strikeout.return  
      Add strikeout
```

---

### Description

Pandoc's markdown strikethrough format (e.g. `~~F00~~`) is added to character string.

### Usage

```
pandoc.strikeout.return(x)
```

### Arguments

x                    character vector

### Value

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

### References

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

### See Also

[pandoc.emphasis](#) [pandoc.strong](#) [pandoc.verbatim](#)

### Examples

```
pandoc.strikeout('F00')  
pandoc.strikeout(c('F00', '~~F00~~'))  
pandoc.strikeout.return('F00')
```

pandoc.strong.return *Strong emphasis*

---

### Description

Pandoc's markdown strong emphasis format (e.g. **\*\*F00\*\***) is added to character string.

### Usage

```
pandoc.strong.return(x)
```

### Arguments

x                    character vector

### Value

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

### References

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

### See Also

[pandoc.emphasis](#) [pandoc.strikeout](#) [pandoc.verbatim](#)

### Examples

```
pandoc.strong('F00')
pandoc.strong(c('F00', '**F00**'))
pandoc.strong.return('F00')
```

---

pandoc.table.return *Create a table*

---

### Description

Creates a Pandoc's markdown style table with optional caption and some other tweaks. See 'Details' below.

**Usage**

```

pandoc.table.return(
  t,
  caption,
  digits = panderoptions("digits"),
  decimal.mark = panderoptions("decimal.mark"),
  big.mark = panderoptions("big.mark"),
  round = panderoptions("round"),
  missing = panderoptions("missing"),
  justify,
  style = c("multiline", "grid", "simple", "rmarkdown", "jira"),
  split.tables = panderoptions("table.split.table"),
  split.cells = panderoptions("table.split.cells"),
  keep.trailing.zeros = panderoptions("keep.trailing.zeros"),
  keep.line.breaks = panderoptions("keep.line.breaks"),
  plain.ascii = panderoptions("plain.ascii"),
  use.hyphening = panderoptions("use.hyphening"),
  row.names,
  col.names,
  emphasize.rownames = panderoptions("table.emphasize.rownames"),
  emphasize.rows,
  emphasize.cols,
  emphasize.cells,
  emphasize.strong.rows,
  emphasize.strong.cols,
  emphasize.strong.cells,
  emphasize.italics.rows,
  emphasize.italics.cols,
  emphasize.italics.cells,
  emphasize.verbatim.rows,
  emphasize.verbatim.cols,
  emphasize.verbatim.cells,
  ...
)

```

**Arguments**

t	data frame, matrix or table
caption	caption (string) to be shown under the table
digits	passed to format. Can be a vector specifying values for each column (has to be the same length as number of columns).
decimal.mark	passed to format
big.mark	passed to format
round	passed to round. Can be a vector specifying values for each column (has to be the same length as number of columns). Values for non-numeric columns will be disregarded.
missing	string to replace missing values

justify	defines alignment in cells passed to format. Can be left, right or centre, which latter can be also spelled as center. Defaults to centre. Can be abbreviated to a string consisting of the letters l, c and r (e.g. 'lcr' instead of c('left', 'centre', 'right')).
style	which Pandoc style to use: simple, multiline, grid or rmarkdown
split.tables	where to split wide tables to separate tables. The default value (80) suggests the conventional number of characters used in a line, feel free to change (e.g. to Inf to disable this feature) if you are not using a VT100 terminal any more :)
split.cells	where to split cells' text with line breaks. Default to 30, to disable set to Inf. Can be also supplied as a vector, for each cell separately (if length(split.cells) == number of columns + 1, then first value in split.cells if for row names, and others are for columns). Supports relative (percentage) parameters in combination with split.tables.
keep.trailing.zeros	to show or remove trailing zeros in numbers on a column basis width
keep.line.breaks	(default: FALSE) if to keep or remove line breaks from cells in a table
plain.ascii	(default: FALSE) if output should be in plain ascii (without markdown markup) or not
use.hyphening	boolean (default: FALSE) if try to use hyphening when splitting large cells according to table.split.cells. Requires <b>syll</b> .
row.names	if FALSE, row names are suppressed. A character vector of row names can also be specified here. By default, row names are included if rownames(t) is neither NULL nor identical to 1:nrow(x)
col.names	a character vector of column names to be used in the table
emphasize.rownames	boolean (default: TRUE) if row names should be highlighted
emphasize.rows	deprecated for emphasize.italics.rows argument
emphasize.cols	deprecated for emphasize.italics.cols argument
emphasize.cells	deprecated for emphasize.italics.cells argument
emphasize.strong.rows	see emphasize.italics.rows but in bold
emphasize.strong.cols	see emphasize.italics.cols but in bold
emphasize.strong.cells	see emphasize.italics.cells but in bold
emphasize.italics.rows	a vector for a two dimensional table specifying which rows to emphasize
emphasize.italics.cols	a vector for a two dimensional table specifying which cols to emphasize
emphasize.italics.cells	a vector for one-dimensional tables or a matrix like structure with two columns for row and column indexes to be emphasized in two dimensional tables. See e.g. which(...,arr.ind = TRUE)



```

emphasize.verbatim.rows
    see emphasize.italics.rows but in verbatim
emphasize.verbatim.cols
    see emphasize.italics.cols but in verbatim
emphasize.verbatim.cells
    see emphasize.italics.cells but in verbatim
...
    unsupported extra arguments directly placed into /dev/null

```

## Details

This function takes any tabular data as its first argument and will try to make it pretty like: rounding and applying digits and custom decimal.mark to numbers, auto-recognizing if row names should be included, setting alignment of cells and dropping trailing zeros by default.

pandoc.table also tries to split large cells with line breaks or even the whole table to separate parts on demand. Other arguments lets the use to highlight some rows/cells/cells in the table with italic or bold text style.

For more details please see the parameters above and passed arguments of [panderOptions](#).

## Value

By default this function outputs (see: cat) the result. If you would want to catch the result instead, then call pandoc.table.return instead.

## Note

If caption is missing, then the value is first checked in t object's caption attribute and if not found in an internal buffer set by link{set.caption}. justify parameter works similarly, see [set.alignment](#) for details.

## References

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

## See Also

[set.caption](#), [set.alignment](#)

## Examples

```

pandoc.table(mtcars)

# caption
pandoc.table(mtcars, 'Motor Trend Car Road Tests')

# other input/output formats
pandoc.table(mtcars[, 1:3], decimal.mark = ',')
pandoc.table(mtcars[, 1:3], decimal.mark = ',', justify = 'right')
pandoc.table(matrix(sample(1:1000, 25), 5, 5))
pandoc.table(matrix(runif(25), 5, 5))

```

```

pandoc.table(matrix(runif(25), 5, 5), digits = 5)
pandoc.table(matrix(runif(25),5,5), round = 1)
pandoc.table(table(mtcars$am))
pandoc.table(table(mtcars$am, mtcars$gear))
pandoc.table(table(state.division, state.region))
pandoc.table(table(state.division, state.region), justify = 'centre')

m <- data.frame(a = c(1, -500, 10320, 23, 77),
  b = runif(5),
  c = c('a', 'bb', 'ccc', 'dddd', 'eeee'))
pandoc.table(m)
pandoc.table(m, justify = c('right', 'left', 'centre'))
pandoc.table(m, justify = 'rlc') # Same as upper statement

## splitting up too wide tables
pandoc.table(mtcars)
pandoc.table(mtcars, caption = 'Only once after the first part!')

## tables with line breaks in cells
## NOTE: line breaks are removed from table content in case keep.line.breaks is set to FALSE
## and added automatically based on "split.cells" parameter!
t <- data.frame(a = c('hundreds\nof\nmouses', '3 cats'), b=c('FOO is nice', 'BAR\nBAR2'))
pandoc.table(t)
pandoc.table(t, split.cells = 5)

## exporting tables in other Pandoc styles
pandoc.table(m)
pandoc.table(m, style = "grid")
pandoc.table(m, style = "simple")
pandoc.table(t, style = "grid")
pandoc.table(t, style = "grid", split.cells = 5)
tryCatch(pandoc.table(t, style = "simple", split.cells = 5),
  error = function(e) 'Yeah, no newline support in simple tables')

## highlight cells
t <- mtcars[1:3, 1:5]
pandoc.table(t$mpg, emphasize.italics.cells = 1)
pandoc.table(t$mpg, emphasize.strong.cells = 1)
pandoc.table(t$mpg, emphasize.italics.cells = 1, emphasize.strong.cells = 1)
pandoc.table(t$mpg, emphasize.italics.cells = 1:2)
pandoc.table(t$mpg, emphasize.strong.cells = 1:2)
pandoc.table(t, emphasize.italics.cells = which(t > 20, arr.ind = TRUE))
pandoc.table(t, emphasize.italics.cells = which(t == 6, arr.ind = TRUE))
pandoc.table(t, emphasize.verbatim.cells = which(t == 6, arr.ind = TRUE))
pandoc.table(t, emphasize.verbatim.cells = which(t == 6, arr.ind = TRUE),
  emphasize.italics.rows = 1)
## with helpers
emphasize.cols(1)
emphasize.rows(1)
pandoc.table(t)

emphasize.strong.cells(which(t > 20, arr.ind = TRUE))
pandoc.table(t)

```

```

### plain.ascii
pandoc.table(mtcars[1:3, 1:3], plain.ascii = TRUE)

### keep.line.breaks
x <- data.frame(a="Pandoc\nPackage")
pandoc.table(x)
pandoc.table(x, keep.line.breaks = TRUE)

## split.cells
x <- data.frame(a = "foo bar", b = "foo bar")
pandoc.table(x, split.cells = 4)
pandoc.table(x, split.cells = 7)
pandoc.table(x, split.cells = c(4, 7))
pandoc.table(x, split.cells = c("20%", "80%"), split.tables = 30)

y <- c("aa aa aa", "aaa aaa", "a a a a", "aaaaa", "bbbb bbbb bbbb", "bb bbb bbbb")
y <- matrix(y, ncol = 3, nrow = 2)
rownames(y) <- c("rowname one", "rowname two")
colnames(y) <- c("colname one", "colname two", "colname three")
pandoc.table(y, split.cells = 2)
pandoc.table(y, split.cells = 6)
pandoc.table(y, split.cells = c(2, 6, 10))
pandoc.table(y, split.cells = c(2, Inf, Inf))

## first value used for rownames
pander(y, split.cells = c(5, 2, Inf, Inf))
pandoc.table(y, split.cells = c(5, 2, Inf, 5, 3, 10))

## when not enough reverting to default values
pandoc.table(y, split.cells = c(5, 2))

## split.cells with hyphenation
x <- data.frame(a = "Can be also supplied as a vector, for each cell separately",
               b = "Can be also supplied as a vector, for each cell separately")
pandoc.table(x, split.cells = 10, use.hyphening = TRUE)

```

---

pandoc.title.return     *Create title block*

---

## Description

Creates a Pandoc's markdown style title block with optional author, title and date fields.

## Usage

```
pandoc.title.return(author = "", title = "", date = "")
```

**Arguments**

author	character vector or semicolon delimited list of authors without line break
title	character vector of lines of title or multiline string with \n separators
date	any string fit in one line

**Value**

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

**References**

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

**Examples**

```
pandoc.title('Tom', 'Render pandoc in R', '2012-05-16')
pandoc.title(c('Tom', 'Jerry'), 'Render pandoc in R', '2012-05-16')
pandoc.title('Tom; Jerry', 'Render pandoc in R', '2012-05-16')
pandoc.title('Tom; Jerry', c('Render', 'pandoc', 'in R'), '2012-05-16')
pandoc.title('Tom; Jerry', 'Render\n  pandoc \n    in R', '2012-05-16')

## missing fields

pandoc.title('Tom; Jerry', 'Render pandoc in R')
pandoc.title('Tom; Jerry')
pandoc.title(title = 'Render pandoc in R', date = '2012-05-16')
```

---

`pandoc.verbatim.return`

*Add verbatim*

---

**Description**

Pandoc's markdown verbatim format (e.g. ``FOO``) is added to character string.

**Usage**

```
pandoc.verbatim.return(x, style = c("inline", "indent", "delim"), attrs = "")
```

**Arguments**

x	character vector
style	show code inline or in a separate (indented or delimited) block
attrs	(optionally) pass ID, classes and any attribute to the delimited block

**Value**

By default this function outputs (see: `cat`) the result. If you would want to catch the result instead, then call the function ending in `.return`.

**References**

John MacFarlane (2012): *\_Pandoc User's Guide\_*. <https://johnmacfarlane.net/pandoc/README.html>

**See Also**

[pandoc.emphasis](#) [pandoc.strikeout](#) [pandoc.strong](#)

**Examples**

```
# different styles/formats
pandoc.verbatim('FOO')

src <- c('FOO', 'indent', 'BAR' )
pandoc.verbatim(src)
pandoc.verbatim.return(src)
pandoc.verbatim(c('FOO\nBAR ', ' I do R'), 'indent')
pandoc.verbatim(c('FOO\nBAR ', ' I do R'), 'delim')

# add highlighting and HTML/LaTeX ID and classes (even custom attribute)
pandoc.verbatim(c('cat("FOO")', 'mean(bar)'), 'delim', '.R #MyCode custom_var="10"')
```

---

path_to_pandoc	<i>Find path to the pandoc binary by checking the PATH and the RSTUDIO_PANDOC env vars</i>
----------------	--

---

**Description**

Find path to the pandoc binary by checking the PATH and the RSTUDIO\_PANDOC env vars

**Usage**

```
path_to_pandoc()
```

**Value**

file path

---

`redraw.recordedplot`     *Redraws plot saved in file*

---

### Description

This function is a wrapper around `redrawPlot`.

### Usage

```
redraw.recordedplot(file)
```

### Arguments

`file`                    path and name of an rds file containing a plot object to be redrawn

### References

Thanks to Jeroen Ooms <https://stat.ethz.ch/pipermail/r-devel/2012-January/062973.html>, JJ Allaire <https://github.com/rstudio/rstudio/commit/eb5f6f1db4717132c2ff11f068ffa6e8b2a5f0b>, and Gabriel Becker.

### See Also

[evals](#)

---

`redrawPlot`                    *Redraw a recordedplot, grid, trellis, or ggplot2 plot.*

---

### Description

This function redraws the plot represented by `rec_plot`. It can redraw `grid/trellis/ggplot2/etc` plots, as well as `recordedplot` objects. For `recordedplot` objects it acts as a wrapper around `replayPlot` with memory tweaks to fix native symbol address errors when the `recordedplot` was loaded from an `rda/rds` file.

### Usage

```
redrawPlot(rec_plot)
```

### Arguments

`rec_plot`                    the plot object to redraw

## References

Thanks to Jeroen Ooms <https://stat.ethz.ch/pipermail/r-devel/2012-January/062973.html>, JJ Allaire <https://github.com/rstudio/rstudio/commit/eb5f6f1db4717132c2ff111f068ffa6e8b2a5f0b>, and Gabriel Becker.

## See Also

[redraw.recordedplot](#)

---

remove.extra.newlines *Remove more than two joined newlines*

---

## Description

Remove more than two joined newlines

## Usage

```
remove.extra.newlines(x)
```

## Arguments

x                    character vector

## Examples

```
remove.extra.newlines(c('\n\n\n', '\n\n', '\n'))
```

---

repChar                    *Repeating chars*

---

## Description

Repeating a string n times and returning a concatenated character vector.

## Usage

```
repChar(x, n, sep = "")
```

## Arguments

x                    string to repeat  
n                    integer  
sep                  separator between repetitions

## Value

character vector

---

set.alignment	<i>Sets alignment for tables</i>
---------------	----------------------------------

---

### Description

This is a helper function to update the alignment (justify parameter in `pandoc.table`) of the next returning table. Possible values are: centre or center, right, left.

### Usage

```
set.alignment(
  default = panderoptions("table.alignment.default"),
  row.names = panderoptions("table.alignment.rownames"),
  permanent = FALSE
)
```

### Arguments

default	character vector which length equals to one (would be repeated n times) or n - where n equals to the number of columns in the following table
row.names	string holding the alignment of the (optional) row names
permanent	(default FALSE) if alignment is permanent (for all future tables) or not. It's cleaner to use <code>panderoptions</code> instead.

---

set.caption	<i>Adds caption in current block</i>
-------------	--------------------------------------

---

### Description

This is a helper function to add a caption to the returning image/table.

### Usage

```
set.caption(x, permanent = FALSE)
```

### Arguments

x	string
permanent	(default FALSE) if caption is permanent (for all future tables) or not



---

splitLine	<i>Split line with line breaks depending on max.width</i>
-----------	---

---

**Description**

This is a helper function to insert line breaks depending on (`split.cells` parameter of `pandoc.table`) of the returning table.

**Usage**

```
splitLine(
  x,
  max.width = panderoptions("table.split.cells"),
  use.hyphening = FALSE
)
```

**Arguments**

<code>x</code>	string to be split. Works only with one string. Non-string arguments and multi-dimensional arguments are returned unchanged
<code>max.width</code>	default integer value specifying max number of characters between line breaks
<code>use.hyphening</code>	(default: FALSE) if try to use hyphening when splitting large cells according to <code>table.split.cells</code> . Requires <code>syll</code> .

**Value**

character string with line breaks

**Examples**

```
splitLine('foo bar', 6)
splitLine('foo bar', 7)
splitLine('Pandoc Package', 3, TRUE)
```

---

trim.spaces	<i>Trim leading and trailing spaces</i>
-------------	---

---

**Description**

Trim leading and trailing spaces

**Usage**

```
trim.spaces(x)
```

**Arguments**

x                    character vector

**Value**

character vector

**See Also**

trim.space in rapport package

---

wrap

*Wrap Vector Elements*

---

**Description**

Wraps vector elements with string provided in wrap argument.

**Usage**

```
wrap(x, wrap = "\\")
```

**Arguments**

x                    a vector to wrap  
wrap                a string to wrap around vector elements

**Value**

a string with wrapped elements

**Author(s)**

Aleksandar Blagotic

**References**

This function was moved from rapport package: <https://rapporter.github.io/rapport/>.

**Examples**

```
## Not run:  
wrap('foobar')  
wrap(c('fee', 'fi', 'foo', 'fam'), '_')  
  
## End(Not run)
```

# Index

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