

# Package ‘trimmer’

October 14, 2022

**Title** Trim an Object

**Version** 0.8.1

**Description** A lightweight toolkit to reduce the size of a list object. The object is minimized by recursively removing elements from the object one-by-one. The process is constrained by a reference function call specified by the user, where the target object is given as an argument. The procedure will not allow elements to be removed from the object, that will cause results from the function call to diverge from the function call with the original object.

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**Encoding** UTF-8

**LazyData** true

**Suggests** testthat (>= 2.1.0), knitr, rmarkdown

**Imports** data.table, crayon, cli, pryr

**RoxygenNote** 6.1.1

**VignetteBuilder** knitr

**NeedsCompilation** no

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adjust_candidates	<i>Adjust Data Table with Candidate Elements for Elimination</i>
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**Description**

Adjusts positions of all candidates for elimination in data.table after removing a candidate (due to the fact, that the positions may shift).

**Usage**

```
adjust_candidates(cand, cand_top_idx)
```

**Arguments**

cand	data.table with candidates for elimination given by their position indices.
cand_top_idx	numeric position index of candidate to be removed.

**Value**

data.table candidates after any adjustments to position indices of candidates.

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convert_idx_to_name	<i>Convert Numbered Index to Named Index of List Element</i>
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**Description**

Convert Numbered Index to Named Index of List Element

**Usage**

```
convert_idx_to_name(vec, obj)
```

**Arguments**

vec	numeric numeric index of list element.
obj	list

**Value**

character named index of list element.

**Examples**

```
d <- list(a = list(b = list(c = 3, d = 5), e = c(2,4)))
num_idx <- c(1,1,2)
convert_idx_to_name(num_idx, d)
```

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 fix\_undefined\_global\_vars

*Fix til at undgå R CMD check notes for "no visible binding for global variable"*

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### Description

Dette script gør det muligt at referere til kolonner i data frames ved hjælp af Non Standard Evaluation (NSE) i databehandlingspakker som data.table og dplyr, uden at dette medfører R CMD check notes angående "no visible binding for global variable". Navnene på de variable, der refereres til ved hjælp af NSE, skal blot angives i en vektor til funktionen globalVariables() nedenfor.

### Usage

```
fix_undefined_global_vars()
```

### Details

Dette er den anbefalede løsning fra CRAN.

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get\_results\_for\_object

*Compute Results From Function Call with Object as Argument*

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### Description

Compute Results From Function Call with Object as Argument

### Usage

```
get_results_for_object(obj, obj_arg_name, fun, ...,
  tolerate_warnings = TRUE)
```

### Arguments

obj	list R object to be trimmed. <code>_MUST_</code> inherit from the 'list' class.
obj_arg_name	character what is the name of the parameter, that 'obj' must be set to, when invoking 'fun'. Defaults to NULL, in which case the function assumes, that the 'obj' matches the first parameter of 'fun'.
fun	function function that must return the same results, when invoked with 'obj' both before and after trimming.
...	other (named) arguments for 'fun'.
tolerate_warnings	logical tolerate warnings (=TRUE) Or not (=FALSE) from function call results?

**Value**

results from function call.

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pf_obj_size	<i>Convert Size in Bytes to Print Friendly String</i>
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**Description**

Convert Size in Bytes to Print Friendly String

**Usage**

```
pf_obj_size(x, digits = 2)
```

**Arguments**

x	numeric object size in digits.
digits	numeric number of digits you want.

**Value**

character friend friendly string.

**Examples**

```
pf_obj_size(10)
pf_obj_size(1010)
pf_obj_size(2e06)
```

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trim	<i>Trim an R Object</i>
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**Description**

Trims an R object whilst presuming the results of a given function call, where the R object is given as an argument. One popular example could be trimming an R model object whilst presuming the results of the [predict](#) function on a sample of data.

**Usage**

```
trim(obj, obj_arg_name = NULL, fun = predict, size_target = 0,
      tolerate_warnings = FALSE, verbose = TRUE, dont_touch = list(),
      ...)
```

**Arguments**

obj	list R object to be trimmed. <i>_MUST_</i> inherit from the 'list' class.
obj_arg_name	character what is the name of the parameter, that 'obj' must be set to, when invoking 'fun'. Defaults to NULL, in which case the function assumes, that the 'obj' matches the first parameter of 'fun'.
fun	function function that must return the same results, when invoked with 'obj' both before and after trimming.
size_target	numeric desired maximum size in <i>_MegaBytes_</i> of object after trimming has been conducted. When this size is achieved, the trimming stops. Defaults to 0, in which case trimming continues, until no further trimming can be done without breaking results from 'fun'.
tolerate_warnings	logical tolerate warnings (=TRUE) Or not (=FALSE) from function call results?
verbose	logical print messages?
dont_touch	list list with name indices of elements, that must not be removed from object by trimming procedure.
...	other (named) arguments for 'fun'.

**Examples**

```
# get training data for predictive model.
trn <- datasets::mtcars

# estimate model.
mdl <- lm(mpg ~ ., data = trn)
trim(obj = mdl, obj_arg_name = "object", fun = predict, newdata = trn)
trim(obj = mdl, obj_arg_name = "object", fun = predict, newdata = trn,
dont_touch = list(c("model"), c("qr", "tol")))
```

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