Package 'portion'

October 31, 2023

Type Package

Title Extracting a Data Portion

Version 0.1.0

Description Provides a simple method to extract portions of a vector, matrix, or data.frame.
The relative portion size and the way the portion is selected can be chosen.

License GPL (>= 3)

Encoding UTF-8

RoxygenNote 7.2.3

Suggests testthat (>= 3.0.0)

Config/testthat/edition 3

Imports stats

URL https://github.com/loelschlaeger/portion

BugReports https://github.com/loelschlaeger/portion/issues

NeedsCompilation no

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R topics documented:

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portion	*Extracting a data portion*

Description

extract a portion of data saved as a `vector`, `matrix`, `data.frame`, or `list`

Usage

```
portion(x, proportion, how, centers = 2, ...)

## S3 method for class 'numeric'
portion(x, proportion, how, centers = 2, ...)

## S3 method for class 'matrix'
portion(x, proportion, how, centers = 2, byrow = TRUE, ignore = integer(), ...)

## S3 method for class 'data.frame'
portion(x, proportion, how, centers = 2, byrow = TRUE, ignore = integer(), ...)

## S3 method for class 'list'
portion(x, proportion, how, centers = 2, ...)
```

Arguments

x	an object to be portioned
proportion	a `numeric` between 0 and 1, the relative portion size
how	a `character`, specifying the portion method, one of: - `"random"` (default), portion at random - `"first"`, portion to the first elements - `"last"`, portion to the last elements - `"similar"`, portion to similar elements based on clustering - `"dissimilar"`, portion to dissimilar elements based on clustering
centers	(only relevant if how is `"similar}` or `\code{"dissimilar"})` an integer (default is 2), passed on to [kmeans](#)
...	further arguments to be passed to or from other methods
byrow	TRUE to portion row-wise (default) or FALSE to portion column-wise
ignore	(only relevant if how is `"similar}` or `\code{"dissimilar"})` an integer vector of row indices (or column indices if byrow = FALSE) to ignore during clustering

Value

the portioned input x with the (row, column) indices used added as attributes `"indices"`

Examples

```
# can portion vectors, matrices, data.frames, and lists of such types
portion(
  list(
    1:10,
    matrix(LETTERS[1:12], nrow = 3, ncol = 4),
    data.frame(a = 1:6, b = -6:-1)
  ),
  proportion = 0.5,
  how = "first"
)

# can portion similar elements
portion(c(rep(1, 5), rep(2, 5)), proportion = 0.5, how = "similar")
```

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