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Description Tools for working with strings in R

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`adapt.blocks.after.replace`
Helper function

Description

Helper function

Usage

`adapt.blocks.after.replace(block, ...)`

`adapt.pos.after.replace`
Helper function

Description

Helper function

Usage

`adapt.pos.after.replace(pos, left, len.old, len.new)`

`blocks.add.level.0` *Add level 0 to blocks*

Description

Add level 0 to blocks

Usage

`blocks.add.level.0(blocks, str, end = nchar(str))`

`char.matrix.to.str` *converts a matrix of of single chars in a vector of one string per row*

Description

converts a matrix of of single chars in a vector of one string per row

Usage

`char.matrix.to.str(mat, collapse = "")`

`char.vector.to.str` *converts a vector of chars into a single string or multiple strings, broken by sep*

Description

converts a vector of chars into a single string or multiple strings, broken by sep

Usage

```
char.vector.to.str(vec, sep = NULL, collapse = "")
```

`check.str.par` *Check if parameter to a str function have allowed dimensions*

Description

Check if parameter to a str function have allowed dimensions

Usage

```
check.str.par(str, para)
```

`combine.pos.and` *Combine two positions via logical AND*

Description

Combine two positions via logical AND

Usage

```
combine.pos.and(pos1, pos2, return.ind = FALSE)
```

`combine.pos.list.and` *Combine a list of positions via logical AND*

Description

Combine a list of positions via logical AND

Usage

```
combine.pos.list.and(pos.list, return.ind = TRUE)
```

cumsum.ignore	<i>Cummulative sum of number of characters that are ignored</i>
---------------	---

Description

Cummulative sum of number of characters that are ignored

Usage

```
## S3 method for class 'ignore'
cumsum(ignore)
```

Examples

```
## Not run:
str =c("Now that is a nice matrix. Not?","but short!")
ignore = rep(FALSE,max(nchar(str)))
ignore[c(4:5,8:20)] = TRUE
ignore
cumsum.ignore(ignore)
ignore = matrix(ignore,nrow=NROW(str),ncol=length(ignore),byrow=TRUE)
cumsum.ignore(ignore)

## End(Not run)
```

get.ignore	<i>Gets a logical ignore vector or list from pos matrices</i>
------------	---

Description

Gets a logical ignore vector or list from pos matrices

Usage

```
get.ignore(ignore = NULL, ignore.pos = NULL, only.pos = NULL,
end = NULL, str = NULL)
```

has.substr	<i>Returns for every element of str whether there is a match with pattern works similar than grepl</i>
------------	--

Description

Returns for every element of str whether there is a match with pattern works similar than grepl

Usage

```
has.substr(str, pattern, fixed = TRUE, perl = FALSE, ignore = NULL)
```

Examples

```
## Not run:
str = c("12347382709")
pattern = c("a", "4", "56", "34", "766", "b")
has.substr(str, pattern)

## End(Not run)
```

ignore.and.complement.pos	<i>Transforms a boolean vector ignore to a pos matrix and its complement</i>
---------------------------	--

Description

Transforms a boolean vector ignore to a pos matrix and its complement

Usage

```
ignore.and.complement.pos(ignore = NULL, ignore.pos = NULL,
  only.pos = NULL)
```

Value

A list first element is the pos and complement matrix. The second element is a vector

ignore.to.pos	<i>Transforms a boolean vector ignore to a pos matrix</i>
---------------	---

Description

Transforms a boolean vector ignore to a pos matrix

Usage

```
ignore.to.pos(ignore, complement = FALSE)
```

Examples

```
## Not run:
ignore = c(TRUE, FALSE, TRUE, TRUE, FALSE, TRUE, FALSE)
ignore.to.pos(ignore)

ignore = list(c(TRUE, FALSE, TRUE, TRUE, FALSE, TRUE, FALSE), c(TRUE), c(), c(FALSE, FALSE))
ignore.to.pos(ignore)
ignore = c(TRUE, FALSE, TRUE, TRUE, FALSE, TRUE, FALSE)
ignore.and.complement.pos(ignore)

## End(Not run)
```

merge.lines	<i>Combines c("A","B") into a single string seperated by line breaks</i>
-------------	--

Description

Combines c("A","B") into a single string seperated by line breaks

Usage

```
## S3 method for class 'lines'
merge(txt, collapse = "\n")
```

Examples

```
## Not run:
merge = merge.lines(c("A", "B"))
merge
sep.lines(merge)

## End(Not run)
```

pos.complement	<i>Returns the complement of a pos matrix again as a pos matrix</i>
----------------	---

Description

Returns the complement of a pos matrix again as a pos matrix

Usage

```
pos.complement(pos, is.sorted = FALSE, start = 1, end = NULL,
  keep.pos = FALSE, str = NULL)
```

Examples

```
## Not run:
pos = matrix(c(
  2,2,
  5,8,
  10,10
),3,2,byrow=TRUE)
pos.complement(pos)
pos.complement(pos,keep.pos=TRUE)

## End(Not run)
```

pos.to.ignore	<i>Transforms a pos matrix into a logical ignore vector Warning length is not</i>
---------------	---

Description

Transforms a pos matrix into a logical ignore vector Warning length is not

Usage

```
pos.to.ignore(pos, end = 1000000L, complement = FALSE, str = NULL)
```

pos.with.complement	<i>Returns a pos matrix combined with its complement. The matrix has an attribute "complement" which is a logical vector indicating whether a row in the matrix is the original matrix or a complement</i>
---------------------	--

Description

Returns a pos matrix combined with its complement. The matrix has an attribute "complement" which is a logical vector indicating whether a row in the matrix is the original matrix or a complement

Usage

```
pos.with.complement(pos, is.sorted = FALSE, end = NULL)
```

Examples

```
## Not run:  
pos = matrix(c(  
  2,2,  
  5,8,  
  10,10  
) ,3,2,byrow=TRUE)  
pos.with.complement(pos)  
  
## End(Not run)
```

regexp.fixed	<i>strings will be treated as fixed constant in regex</i>
--------------	---

Description

strings will be treated as fixed constant in regex

Usage

```
regexp.fixed(str, fixed = TRUE)
```

Arguments

str	a string vector
fixed	if FALSE just return str

Value

transformed string vector of same size as str

Examples

```
## Not run:  
str = c("A.", "*")  
# regexp.fixed transforms strings  
regexp.fixed(str)  
# fixed in stringr flags strings instead  
fixed(str)  
  
## End(Not run)
```

```
replace.german.umlaute
```

replaces German Umlaute with ascii letters oe, ue, ae

Description

replaces German Umlaute with ascii letters oe, ue, ae

Usage

```
replace.german.umlaute(txt = readLines(file), file = NULL,  
  write.file = !is.null(file))
```

```
sep.lines
```

transforms a single string with line breaks into a vector with one element for each line

Description

transforms a single string with line breaks into a vector with one element for each line

Usage

```
sep.lines(txt, collapse = "\n")
```

str.at.pos	<i>pos is a matrix or a list of matrices specifying positions as returned by str.locate.all</i>
------------	---

Description

pos is a matrix or a list of matrices specifying positions as returned by str.locate.all

Usage

```
## S3 method for class 'at.pos'
str(str, pos)
```

Examples

```
## Not run:
str = c("012ab0121", "abce", "0had112bb1")
pos = str.locate.all(str, "[a-z]*", fixed=FALSE)
pos
str.at.pos(str, pos)
return(ret)

## End(Not run)
```

str.between	<i>Returns the between the first occurrence of start and the first occurrence of end</i>
-------------	--

Description

Returns the between the first occurrence of start and the first occurrence of end

Usage

```
## S3 method for class 'between'
str(str, start, end, ...)
```

Examples

```
## Not run:
str = c("a * (4+3)", "b+3)+1", "(a*3+(1+2))", " ")
str.between(str, "(", ")")

str.between("#< type and", "#< ", " ")

## End(Not run)
```

<code>str.blocks.pos</code>	<i>Returns a pos matrix indicating blocks like brackets () or quoted parts "text"</i>
-----------------------------	--

Description

We allow for nested blocks. The position matrix also has an attribute level that describes the level of each block

Usage

```
## S3 method for class 'blocks.pos'
str(str, start, end, ignore = NULL,
    ignore.start = ignore, ignore.end = ignore, fixed = TRUE,
    fixed.start = fixed, fixed.end = fixed)
```

Examples

```
## Not run:
str = '1+(5*(2+3)+(2+(4-1)))'
#      123456789012345678901
str.blocks.pos(str,"(",")")
```

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

<code>str.detect</code>	<i>Just a synonym for has.substr</i>
-------------------------	--------------------------------------

Description

Just a synonym for has.substr

Usage

```
## S3 method for class 'detect'
str(str, pattern, fixed = TRUE, perl = FALSE,
    ignore = NULL)
```

str.ends.with	<i>Returns als elements of txt that end with pattern</i>
---------------	--

Description

Returns als elements of txt that end with pattern

Returns als elements of txt that end with pattern

Usage

```
## S3 method for class 'ends.with'
str(txt, pattern)
```

```
## S3 method for class 'ends.with'
str(txt, pattern)
```

Examples

```
## Not run:
str = c("Hi how are you", "hi", "now what", "Hi")
str.ends.with(str,"you")

## End(Not run)
```

str.extract.all	<i>Returns a list that contains for each element of str (or pattern) a vector of all substrings that match the pattern. If for a string no element is matched an empty list is returned</i>
-----------------	---

Description

Returns a list that contains for each element of str (or pattern) a vector of all substrings that match the pattern. If for a string no element is matched an empty list is returned

Usage

```
## S3 method for class 'extract.all'
str(str, pattern, fixed = FALSE, perl = FALSE,
    ignore = NULL)
```

<code>str.extract.first</code>	<i>Returns a vector that contains for each element of str (or pattern) the first substring that matches pattern or NA if no match could be found</i>
--------------------------------	--

Description

Returns a vector that contains for each element of str (or pattern) the first substring that matches pattern or NA if no match could be found

Usage

```
## S3 method for class 'extract.first'
str(str, pattern, fixed = FALSE, perl = FALSE,
     ignore = NULL)
```

<code>str.find</code>	<i>Find substring positions or matches</i>
-----------------------	--

Description

A general wrapper from `str.locate.first`, `str.locate.all`, `str.extract.first`, `str.extract.all`

Usage

```
## S3 method for class 'find'
str(str, pattern, fixed = TRUE, first = FALSE,
     all = !first, simplify = TRUE, matches = FALSE, ...)
```

Arguments

<code>str</code>	vector of strings that will be searched
<code>pattern</code>	a search pattern
<code>fixed</code>	if FALSE perform regular expression search
<code>first</code>	shall only the first element be returned
<code>all</code>	shall all elements be returned
<code>simplify</code>	try to simplify a list return
<code>matches</code>	if FALSE pos will returned, otherwise the extracted substrings

str.inpos	<i>Returns a logical vector with TRUE for every character of str that is in pos</i>
-----------	---

Description

Returns a logical vector with TRUE for every character of str that is in pos

Usage

```
## S3 method for class 'inpos'
str(str, pos)
```

str.left	<i>keeps characters on left</i>
----------	---------------------------------

Description

keeps characters on left

Usage

```
## S3 method for class 'left'
str(str, len = 1)
```

str.left.of	<i>Returns the substring left to the first occurrence of pattern</i>
-------------	--

Description

Returns the substring left to the first occurrence of pattern

Usage

```
## S3 method for class 'left.of'
str(str, pattern, ..., not.found = str)
```

Examples

```
## Not run:
str = c("a = 5", "b+3", "a+3 = 4 = 3", "=")
str.left.of(str, "=")
str.left.of(str, "=", not.found=NA)
str.right.of(str, "=")
str.right.of(str, "=", not.found=NA)

## End(Not run)
```

str.len	<i>a synonym for nchar</i>
---------	----------------------------

Description

a synonym for nchar

Usage

```
## S3 method for class 'len'  
str(str)
```

str.list.to.regexp.or	<i>Transforms a vector of strings like c("A","B","C") into "A B C"</i>
-----------------------	--

Description

Transforms a vector of strings like c("A","B","C") into "A|B|C"

Usage

```
## S3 method for class 'list.to.regexp.or'  
str(str, fixed = TRUE)
```

Arguments

str	a string vector
fixed	if TRUE treats str as constants in regexp

Value

a single string

Examples

```
## Not run:  
greek=c("alpha","beta","gamma")  
str.list.to.regexp.or(greek)  
  
## End(Not run)
```

str.locate.all	<i>Finds start and end positions of all substrings that match pattern</i>
----------------	---

Description

Finds start and end positions of all substrings that match pattern

Usage

```
## S3 method for class 'locate.all'
str(str, pattern, fixed = TRUE, perl = FALSE,
     ignore = NULL, ignore.pos = NULL, only.pos = NULL)
```

Arguments

ignore.pos a logical vector or logical matrix indicating which locations of str shall be ignored in the search

Value

a list, of matrices $n * 2$ matrices. The first column is the start position, second column end position of each match

Examples

```
## Not run:
str.locate.all("0120121", "1")
str.locate.all(c("0120121", "abce", "011"), "1")

str = c("0120121", "abce", "011bb1")
#str = c("0120121")
ignore = rep(FALSE, max(nchar(str)))
ignore[c(2:4)] = TRUE
str.locate.all(str, "1", ignore=ignore)
ignore.pos = rbind(c(2,4))
str.locate.all(str, "1", ignore.pos=ignore.pos)

str.locate.all(str, c("1", "b", "a"), ignore=ignore)

str = c("0120121")
str.locate.all(str, c("1", "b", "2"), ignore=ignore)

# Compare regular expression matching
str = c("012ab0121", "adch3b23", "0123")
gregexpr("[ab]*", str)
str_locate_all(str, "[ab]*")
str.locate.first(str, "[ab]*", fixed=FALSE)
str.locate.all(str, "[ab]*", fixed=FALSE)
str.locate.all(str, c("[ab]*", "3+", "0*"), fixed=FALSE)
```

```

str.locate.first(str,c("[ab]*","2","0*"),fixed=FALSE)
str.locate.all(str,"ab",fixed=FALSE)

return(ret)

## End(Not run)

```

`str.locate.at.end` *Locate a pattern at the end of str*

Description

Locate a pattern at the end of str

Usage

```

## S3 method for class 'locate.at.end'
str(str, pattern, fixed = TRUE)

```

Examples

```

## Not run:
str.locate.at.end(c("0123456012","1230","012","01bsf"),"012")

## End(Not run)

```

`str.locate.at.start` *Locate a pattern at the start of strings*

Description

Locate a pattern at the start of strings

Usage

```

## S3 method for class 'locate.at.start'
str(str, pattern, fixed = TRUE)

```

Examples

```

## Not run:
str.locate.at.start(c("0123456012","1230","012012","01bsf"),"012")
str.locate.at.start("0123456",c("012","0","1"))
str.locate.at.end(c("0123456012","1230","012","01bsf"),"012")

## End(Not run)

```

str.locate.first	<i>Finds start and end positions of first substring that matches pattern</i>
------------------	--

Description

Finds start and end positions of first substring that matches pattern

Usage

```
## S3 method for class 'locate.first'
str(str, pattern, fixed = TRUE, perl = FALSE,
     ignore = NULL, ignore.pos = NULL, only.pos = NULL)
```

Arguments

ignore.pos a logical vector or logical matrix indicating which locations of str shall be ignored in the search

Value

single.return is a 1*2 matrix. First column start position, second column end position

Examples

```
## Not run:

str.locate.first("Hello","l")
str.locate.first(c("Hello","What","lol"),"l")
str.locate.first("Hello",c("l","e"))
str.locate.first(c("Hello","What","lol"),c("l","g","o"))

str = "Hello ernie!"
ignore = rep(FALSE,max(nchar(str)))
ignore[c(2:4)] = TRUE
pos = str.locate.first(str,"e",ignore=ignore)
pos
str.split.at.pos(str,pos[,1],keep.pos=TRUE)

ignore.pos = cbind(2,4)
pos = str.locate.first(str,"e",ignore.pos=ignore.pos)

pos
str.split.at.pos(str,pos[,1],keep.pos=TRUE)

str.detect(str,c("A","[a-z]*"),fixed=FALSE)
```

```

str = c("Hello ernie", "abcdefg", "hello erna")
pos = str.locate.first(str, "e", ignore=ignore)
pos
str.split.at.pos(str, pos, keep.pos=TRUE, pos.mat.like.list=TRUE)

# Compare regular expression matching
str = c("012ab0121", "adch3b23", "0123")
regexpr("[ab]*", str)
gregexpr("[ab]*", str)
gregexpr("[ab]*", str, perl=TRUE)
str_locate(str, c("b"))
str_locate(str, "[ab]*")
str_locate_all(str, "[ab]*")

str.locate.first(str, "[ab]*", fixed=FALSE)
str.detect(str, "[ab]*", fixed=FALSE)

## End(Not run)

```

str.matches.pattern *Check if str completely matches a pattern (not just a substring)*

Description

Check if str completely matches a pattern (not just a substring)

Usage

```

## S3 method for class 'matches.pattern'
str(str, pattern, fixed = TRUE)

```

str.number.matches *Returns the number of matches of pattern in each element of str*

Description

Returns the number of matches of pattern in each element of str

Usage

```

## S3 method for class 'number.matches'
str(str, pattern, ...)

```

str.remove.ends	<i>remove charcaters on left and right of a string str.remove.ends(c("ABCDEF","01"),1,3) returns c("BC", "")</i>
-----------------	--

Description

remove charcaters on left and right of a string str.remove.ends(c("ABCDEF","01"),1,3) returns c("BC", "")

Usage

```
## S3 method for class 'remove.ends'
str(str, left = 0, right = 0)
```

Examples

```
## Not run:
str.remove.ends(c("ABCDEF", "01345"), 1, 3)
str.remove.ends(c("ABCDEF"), 1:2, 1:2)
str.remove.ends(c("ABCDEF", "01345"), 1:2, 1)
# The following calls throw errors!
str.remove.ends(c("ABCDEF", "01345"), 1:2, 1:3)
str.remove.ends(c("ABCDEF", "01345", "NOW!"), 1:2, 1)

## End(Not run)
```

str.remove.ignore	<i>ignore is a logical vector or matrix stating which char positions shall be ignored the function removes the substrings for which ignore=TRUE</i>
-------------------	---

Description

ignore is a logical vector or matrix stating which char positions shall be ignored the function removes the substrings for which ignore=TRUE

Usage

```
## S3 method for class 'remove.ignore'
str(str, ignore)
```

Examples

```
## Not run:
str = c("1234567890ABCDEFGHIJKLMNOPQRSTUVWXYZ", "1234567890")
ignore = rep(FALSE, max(nchar(str)))
ignore[c(4:5, 8:20)] = TRUE
str
str.remove.ignore(str, ignore)

## End(Not run)
```

<code>str.replace</code>	<i>Replaces in str every occurrence of pattern by replacement</i>
--------------------------	---

Description

Replaces in str every occurrence of pattern by replacement

Usage

```
## S3 method for class 'replace'
str(str, pattern, replacement, fixed = TRUE, perl = FALSE,
     ignore = NULL, ignore.pos = NULL, only.pos = NULL,
     ignore.pattern = "_IGNORE_", ...)
```

Arguments

<code>str</code>	the string to be replaced
<code>pattern</code>	the substring to be replaced
<code>replacement</code>	the new substrings

Value

a string

Examples

```
## Not run:
str = c("12345678901234567890")
pattern = c("34", "12")
replacement = c("AB", "Holla die Waldfee")
pos = cbind(1, 10)
str.replace(str, pattern, replacement, ignore.pos=pos)
str.replace(str, pattern, replacement, only.pos=pos)
str.replace(str, pattern, replacement)

str = "int{5*2}*{2*3}"
pattern = "int{_IGNORE_}"
replacement = "integer{_IGNORE_}"
```

```

pos = cbind(c(5,11),c(7,13))
str.replace(str,pattern,replacement, ignore.pos=pos)

## End(Not run)

```

str.replace.at.pos *replace a string at the positions specified by pos*

Description

replace a string at the positions specified by pos

Usage

```

## S3 method for class 'replace.at.pos'
str(str, pos, new, pos.mat.like.list = FALSE)

```

Arguments

str	a vector, or a single element
pos	a matrix of substring positions, or a list of such matrices if str is a vector
new	a vector of new strings for each substring position, or a list of such vectors if length(str)>1

Value

string (vector) of length(str) in which the substrings have been replaced

Examples

```

## Not run:
str = "1234567890"
pos = rbind(c(7,7),c(4,5))
new = c("XXX", "...")
str.replace.at.pos(str, pos, new)

str = c("1234567890", "ahgdasdaajsdgadhabsd")
str.replace.at.pos(str, pos, new)

## End(Not run)

```

str.replace.by.blocks *Replaces in str every occurrence of pattern by replacement*

Description

Replaces in str every occurrence of pattern by replacement

Usage

```
## S3 method for class 'replace.by.blocks'
str(str, pattern, replacement, blocks = NULL,
    sub.txt = "SUB", block.start, block.end, block.ignore = NULL,
    use.levels = NULL, fixed = TRUE, only.replace.smaller.than = NULL,
    only.replace.larger.than = NULL)
```

Arguments

str	the string to be replaced
pattern	the substring to be replaced
replacement	the new substrings
block	a block retrieved from str.block.pos alternatively, you can provide block.start and block.end
block.start	string with which the blocks start, e.g. "("
block.end	string with which the blocks end, e.g. ")"
only.replace.smaller.than	if not NULL only replaces matches whose number of characters is less or equal to only.replace.smaller.than
only.replace.larger.than	if not NULL only replaces matches whose number of characters is bigger or equal to only.replace.larger.than

Value

a string

Examples

```
## Not run:
# Replace latex fractions
str = "5+\frac{x^2+x^2}{1+\frac{2}{x*5}}*2"
str.replace.by.blocks(str, "\frac{ _SUB_ }{ _SUB_ }", "( _SUB1_ ) / ( _SUB2_ )",
    block.start = "{", block.end = "}")
str.replace.by.blocks(str, "\frac{ _SUB_ }{ _SUB_ }", "( _SUB1_ ) / ( _SUB2_ )",
    block.start = "{", block.end = "}",
    only.replace.larger.than=20)
str.replace.by.blocks(str, "\frac{ _SUB_ }{ _SUB_ }", "( _SUB1_ ) / ( _SUB2_ )",
```

```

        block.start = "{", block.end = "}",
        only.replace.smaller.than=20)
str = "\frac{\sigma_{m}-\beta\sigma_{b}}{\beta-1}=\frac{\sigma_{m}-\beta\sigma_{b}}{1-\beta}"

str = "\frac{1}{2}=\frac{3}{4}"
str.replace.by.blocks(str, "\frac{_{SUB_}}{_{SUB_}}", "(_{SUB1_})/(_SUB2_)",
        block.start = "{", block.end = "}")

## End(Not run)

```

str.replace.list	<i>Performs sequentially all replacements of pattern and replace on the same strings str</i>
------------------	--

Description

A very slow implementation

Usage

```
## S3 method for class 'replace.list'
str(str, pattern, replacement, ...)
```

Examples

```
## Not run:
str.replace.list("na dies ist doch",c("a","e"),c("A","E"))

## End(Not run)
```

str.right	<i>keeps characters on right</i>
-----------	----------------------------------

Description

keeps characters on right

Usage

```
## S3 method for class 'right'
str(str, len = 1)
```

str.right.of	<i>Returns the substring right to the first occurrence of pattern</i>
--------------	---

Description

Returns the substring right to the first occurrence of pattern

Usage

```
## S3 method for class 'right.of'
str(str, pattern, ..., not.found = str)
```

str.space	<i>Returns a string consisting of times spaces, vectorized over times</i>
-----------	---

Description

Returns a string consisting of times spaces, vectorized over times

Returns a string consisting of times spaces, vectorized over times

Usage

```
## S3 method for class 'space'
str(times, space = " ")
```

```
## S3 method for class 'space'
str(times, space = " ")
```

str.split	<i>Splits string vectors</i>
-----------	------------------------------

Description

Splits string vectors

Usage

```
## S3 method for class 'split'
str(str, pattern, first = FALSE, keep.match = FALSE, ...)
```

Arguments

str	a vector of strings
pattern	vector where splits take place

Value

A list with same length as str. Each list element i contains the split substrings from str[i]

Examples

```
## Not run:
str = "Hi\n\nyou!"
str.split(str, "\n", keep.match=!TRUE)

str <- c("aes_afe_f", "qwe.rty", "yui0op[3", "b")
#split x on the letter e
str
str.split(str, "e", keep.match=TRUE)
str.split(str, "e", first=TRUE, keep.match=TRUE)

str = c("aes_afe_fe")
ignore.pos = cbind(1,3)
str.split(str, "e", keep.match=TRUE, ignore.pos=ignore.pos)
str.split(str, "e", first=TRUE, keep.match=TRUE, ignore.pos=ignore.pos)

str = "abscde3823nsd34"
str.split(str, "[a-z]*", fixed=FALSE, keep.match=TRUE)
str.split(str, c("[a-z]*", "d"), fixed=FALSE, keep.match=TRUE)

str = c("abscde3823nsd34", "8748274")
str.split(str, c("[a-z]*", "d"), fixed=FALSE, keep.match=TRUE)

## End(Not run)
```

<code>str.split.at.pos</code>	<i>Splits a single string str at positions specified by pos</i>
-------------------------------	---

Description

Splits a single string str at positions specified by pos

Usage

```
## S3 method for class 'split.at.pos'
str(str, pos, keep.pos = FALSE, compl = NULL,
     max.char = max(nchar(str)), pos.mat.like.list = FALSE)
```

Arguments

<code>str</code>	character vector that shall be splitted
<code>pos</code>	split positions can be vector: assuming an element of size 1 that specifies a single char at that positions n*2 matrix: first column left position, right column right position list of vectors or matrices, specifying different pos for different str

keep.pos default=FALSE. If TRUE add the tokens that describe the split to the result otherwise remove them

Value

single return is length of pos (if vector) or NCOL(pos) if pos is matrix

Examples

```
## Not run:
str = c("1234567890")
pos = c(3,5,7)
str.split.at.pos(str,pos,keep.pos = FALSE)
str.split.at.pos(str,pos,keep.pos = TRUE)
pos = rbind(c(2,3),c(5,5),c(7,9))
str.split.at.pos(str,pos,keep.pos = FALSE)
str.split.at.pos(str,pos,keep.pos = TRUE)

# Multiple str
str = c("Hello ernie","abcg","hello erna")
pos = c(2,5,8)
str.split.at.pos(str,pos,keep.pos=TRUE)
pos = list(c(3,5),c(2),c(1,9))
str.split.at.pos(str,pos,keep.pos=TRUE)

str = c("Hello ernie","abcdefg","hello erna")
pos = str.locate.first(str,"e",ignore=ignore)
pos
str.split.at.pos(str,pos,keep.pos=TRUE,pos.mat.like.list=FALSE)
str.split.at.pos(str,pos,keep.pos=TRUE,pos.mat.like.list=TRUE)

## End(Not run)
```

str.starts.with *Returns als elements of txt that begin with pattern*

Description

Returns als elements of txt that begin with pattern

Usage

```
## S3 method for class 'starts.with'
str(txt, pattern)
```

Examples

```
## Not run:  
str = c("Hi how are you", "hi", "now what", "Hi")  
str.starts.with(str,"Hi")  
  
## End(Not run)
```

str.tokenize	<i>An alternative interface to str.split</i>
--------------	--

Description

An alternative interface to str.split

Usage

```
## S3 method for class 'tokenize'  
str(str, split = " ", only.one.split = FALSE,  
simplify = TRUE, ...)
```

str.trim	<i>trims whitespaces from string</i>
----------	--------------------------------------

Description

trims whitespaces from string

Usage

```
## S3 method for class 'trim'  
str(txt)
```

to.char.matrix *converts into a vector of strings into a matrix of single characters*

Description

converts into a vector of strings into a matrix of single characters

Usage

```
to.char.matrix(str, drop = FALSE)
```

Examples

```
## Not run:  
str =c("Now that is a nice matrix", "but short!")  
mat = to.char.matrix(str)  
mat  
char.matrix.to.str(mat)  
vec = to.char.vector(str, collapse="\n")  
vec  
char.vector.to.str(vec, collapse="\n")  
  
## End(Not run)
```

to.char.vector *converts a string into a vector of single characters*

Description

converts a string into a vector of single characters

Usage

```
to.char.vector(str, collapse = "")
```

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