Package ‘asciiruler’

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Type Package
Title Render an ASCII Ruler
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Description An ASCII ruler is for measuring text and is especially useful for sequence analysis. Included in this package are methods to create ASCII rulers and associated GenBank sequence blocks, multi-column text displays that make it easy for viewers to locate nucleotides by position.
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Depends R (>= 2.14)
Imports stringr
Collate 'asciiruler.R'
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Suggests testthat
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R topics documented:

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Description

```
| v borders
| +---------------------------------------------------------+-borders
| |||||||||||||||||||||||||||||||||||||||||||||||||||||||||<-dense_ticks
| | | | | | | | | | | | | | |<-sparse_ticks
| |-30 -20 -10 0 10 20 30 |
| +---------------------------------------------------------+-borders
```

Usage

```r
asciiruler(low = 0L, high = 50L, sparse_ticks = 5L, dense_ticks = TRUE,
block_space = 0L, borders = FALSE, numbers_down = TRUE,
line_break = "\n", strict_width = FALSE)
```

```
default.asciiruler(x)
```

Arguments

- **low**: the range start, can be negative
- **high**: the range end, can be negative
- **sparse_ticks**: intermittent ticks appear every sparse_ticks, set to 0 to hide row
- **dense_ticks**: display a row of ticks at every position
- **block_space**: break up the ruler with a space every block_space blocks encountered, a multiple of sparse_ticks, set to 0 to disable
- **borders**: display borders
- **numbers_down**: display the ruler so the numbers are below the ticks
- **line_break**: the line break character(s)
- **strict_width**: hide numbers whose display would force the ruler to be wider than width(high-low)
- **x**: the asciiruler

Value

asciiruler object with the following slots:

- **output**: delimited ruler string ready to cat
- **content**: vector of lines comprising the ruler
- **width**: width of ruler
- **leftmargin**: position of the first tick relative to the left edge of the ruler
References

Inspired by http://codegolf.stackexchange.com/questions/4910/ascii-ruler-generation

Examples

asciiruler(low=-30, high=30, borders=TRUE)

---

genbank_seqblock

Generate a GenBank sequence block

Description

```
1  6 11 16 21 26 31 36 41 46 51 56
|
||| | | | | | | | | | |
||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
1 GATCACAGGT CTATCACCCT ATTAACCACT CACGGGAGCT CTCCATGCAT TTGGTATTTT
61 CGTCTGGGGG GTGTGCACGC GATAGCATTG CGAGACGCTG GAGCCGGAGC ACCCTATGTC
121 GCAGTATCTG TCTTTGATTC CTGCCCCATC CTATTATTTA TCGACCTAC GTTCAATATT
181 ACAGGCGAAC ATACTTACTA AAGTGTGTTA ATTAATTATTA GCTTGAGGA CATAATAATA
241 ACAATTTGAT GTCTGCACAG CGCCTTTCCA CACAGACATC ATAACAAAAA ATTTCCACCA
301 AACCCCCCCT CCCCGCTTC TGGCCACAGC ACTTAAACAC ATCTCTGC
```

Usage

genbank_seqblock(string, start = 1L, end = 0L, blocksize = 10L,
width = 60L, sep = " ", line_break = "\n", ruler = TRUE, ...)

Arguments

- **string**: the sequence string to display
- **start**: the substring start, should be 1 or greater
- **end**: substring end, should be >start, negative to trim
- **blocksize**: number of characters in each block
- **width**: width of the sequence block
- **sep**: space character between blocks
- **line_break**: the line break character(s)
- **ruler**: display an ascii ruler
- **...**: additional arguments passed to asciiruler

Value

delimited GenBank block string ready to cat
Examples

```r
my_sequence<-'GATCACAGGTCTATCACCCATATAACCCACACTCACGAGGCTCTGCTTTCGCTTCTTGCTGGGG
GTATGCACCGGATCAGATATGGAGACCTGAGGAGCCGGACACCTATGCTGCTGATCTTGTCTTGTCTCTT
ATTAATATGCTGCTGATGACATATATTAAACTAAACTAAACTAAACTAAACTAAACTAAACTAAACTAA
my_seqblock<-genbank_seqblock(my_sequence)
cat(my_seqblock)
```

print.ascii ruler

*Print an ascii ruler*

Description

Print an ascii ruler

Usage

```r
## S3 method for class 'ascii ruler'
print(x, ...)
```

Arguments

- `x`: the ascii ruler
- `...`: additional arguments

width

*Get the total width of an ascii ruler*

Description

Get the total width of an ascii ruler

Usage

```r
width(x, ...)
```

Arguments

- `x`: the ascii ruler
- `...`: additional arguments
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