Chapter 14 of R for Data Science book

**14.2 basics**

**String length**

str\_length() returns the length of a string

str\_c() combines strings from a vector

**str\_c**("x", "y", "z")

*#> [1] "xyz"*

**Combining strings**

sep -- making into one string with separations

**str\_c**("x", "y", sep = ", ")

*#> [1] "x, y"*

str\_replace\_na()

* Helpful because NA values are contagious

x <- **c**("abc", NA)

**str\_c**("|-", x, "-|")

*#> [1] "|-abc-|" NA*

**str\_c**("|-", **str\_replace\_na**(x), "-|")

*#> [1] "|-abc-|" "|-NA-|"*

Collapse – make into one string

**str\_c**(**c**("x", "y", "z"), collapse = ", ")

*#> [1] "x, y, z"*

**Subsetting strings**

str\_sub([string], [start index], [end index]) has start and end arguments that are INCLUSIVE.

x <- **c**("Apple", "Banana", "Pear")

**str\_sub**(x, 1, 3)

*#> [1] "App" "Ban" "Pea"*

*# negative numbers count backwards from end*

**str\_sub**(x, -3, -1)

*#> [1] "ple" "ana" "ear"*

**14.3 matching patterns**

str\_view([string\_vector], [string\_match]) finds matches of string\_match in entries of string\_vector.

x <- **c**("apple", "banana", "pear")

**str\_view**(x, "an")

[string\_match] has different variations:

* “.a.” matches [anycharacter]a[anycharacter]

**str\_view**(x, ".a.")

* apple
* banana
* pear
* ^ to match the start of the string

x <- **c**("apple", "banana", "pear")

**str\_view**(x, "^a")

* apple
* banana
* pear
* $ to match the end of the string

**str\_view**(x, "a$")

* apple
* banana
* pear
* can use both ^ and $ together!

More advanced matching

* \d: matches any digits
* \s: matches any white space
* [abc] matches a, b, or c
* [^abc] matches anything except a, b, or c

Regex characters

You can use *alternation* to pick between one or more alternative patterns. For example, abc|d..f will match either ‘“abc”’, or "deaf". Note that the precedence for | is low, so that abc|xyz matches abc or xyz not abcyz or abxyz. Like with mathematical expressions, if precedence ever gets confusing, use parentheses to make it clear what you want:

**str\_view**(**c**("grey", "gray"), "gr(e|a)y")

* grey
* gray

14.3.4 repetition

14.4 tools

Str\_

Interesting articles

**How the Supreme Court Made It Legal for Cops to Pull You Over for Just About Anything**

Link: <https://www.themarshallproject.org/2015/08/03/how-the-supreme-court-made-it-legal-for-cops-to-pull-you-over-for-just-about-anything>

* “courts in at least a dozen states have excused mistakes made by police who initiated stops based on a misunderstanding of what is legal and what is not”

----

* <http://www2.oaklandnet.com/oakca1/groups/police/documents/webcontent/oak046187.pdf>