Data Structures

To make the best of the R language, you'll need a strong understanding of the basic data types and data structures and how to operate on those.

It is **Very Important** to understand because these are the objects you will manipulate on a day-to-day basis in R. Dealing with object conversions is one of the most common sources of frustration for beginners.

> To understand computations in R, two slogans are helpful:
>
> - Everything that exists is an object.
> - Everything that happens is a function call.
>
> **John Chambers**

`R` has 6 (although we will not discuss the `raw` class for this workshop) atomic classes.

- character
- numeric (real or decimal)
- integer
- logical
- complex

Example	Type
"a", "swc"	character
2, 15.5	numeric
2 (Must add a `L` at end to denote integer)	integer
`TRUE` , `FALSE`	logical
1+4i	complex

```
typeof()   # what is it?
length()   # how long is it? What about two dimensional obj
ects?
```