

Intro to R

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If you haven't already:

Download and install R and RStudio, using instructions here: <https://posit.co/download/rstudio-desktop/>

You **MUST** install R before RStudio

R and RStudio are two separate (but interdependent) things

What is R?

It's a programming language

Commonly used for statistics, analyses, and producing graphs/figures

You write and run code instead of pointing and clicking



What is RStudio?

RStudio is an IDE, or Integrated Development Environment, for working on R code

Basically it makes R code look pretty and arranges your windows correctly

You can run R without RStudio, but it's nicer to have the IDE, so this is how people do it now

Why R?

Free, open, powerful analysis methods

The most common analytical method in ecology/evolution/
biology at present

It can help you get jobs! This is a useful quantitative skill

Other programming languages have similarities

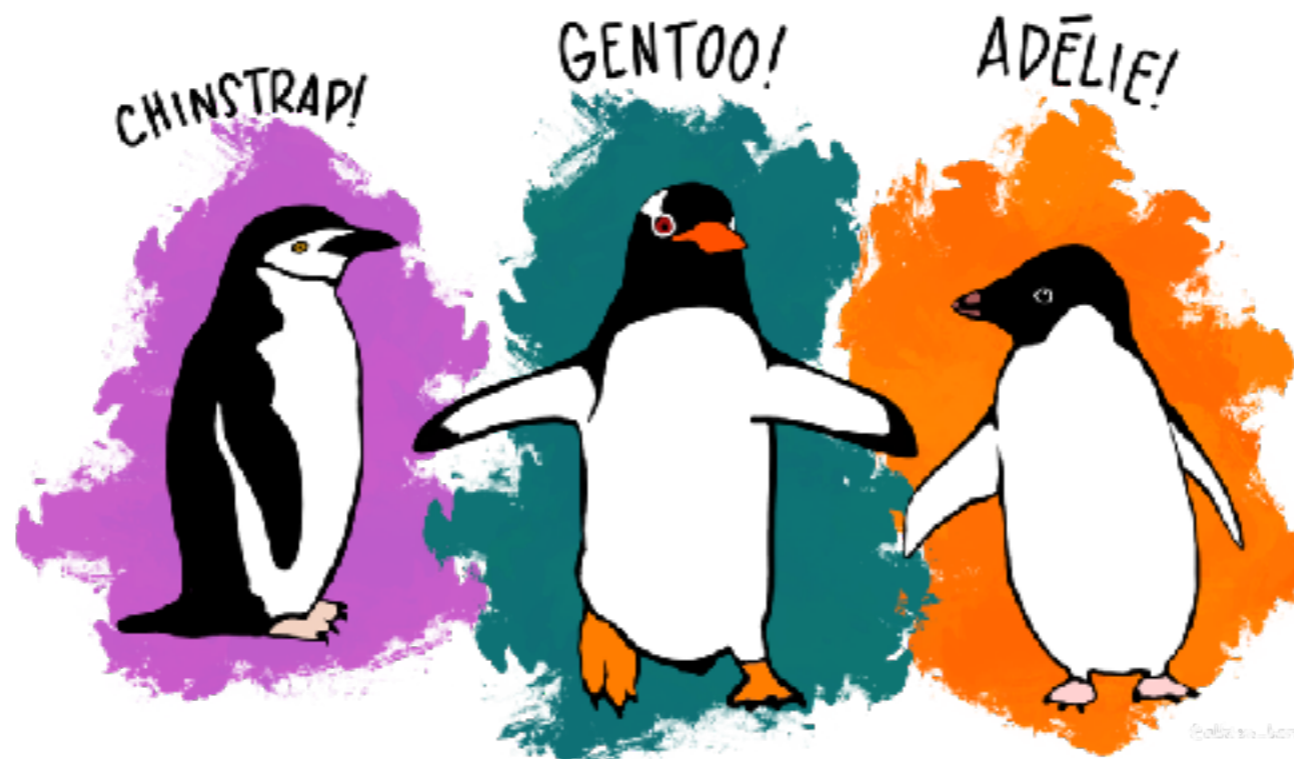
It's actually kind of fun - problem solving, a puzzle!

Some basics:

Different types of data objects

Data frame: something like a spreadsheet, rows and columns, must be rectangular

Vector: a series of values



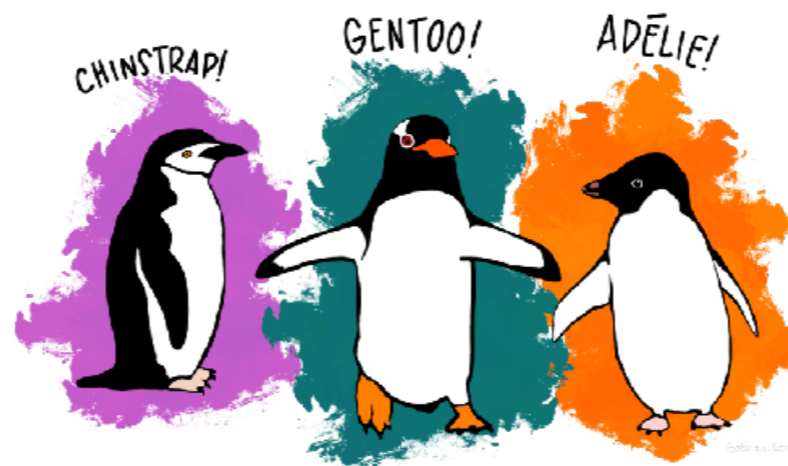
Artwork by @allison_horst

Data types

Numeric, character, integer, factor

Blanks should always be “NA”

Why does this matter? Because some things (means, etc) can only be done with one data type



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ggplot vs base R

ggplot has won, but we should still learn base R too

Important to understand when you're using ggplot/
tidyverse syntax so you can

Now let's go to the script!

Questions??

