Before we start... < TROUBLESHOOTING > R/ RStudio install & setup



https://datacarpentry.org/r-socialsci/



You could interpret a **Data Carpentry workshop** as a 'guided learning experience', therefore, if you feel lost or got stuck, do not worry, this is absolutely normal.

Usually that is absolutely fine if you just pay attention what is happening on the screen, we are demonstrating the same lessons as they are fully available online.

The sessions are interactive and informal, we are here to help one another. And have to admit, we are not able to provide the right answers all the time.

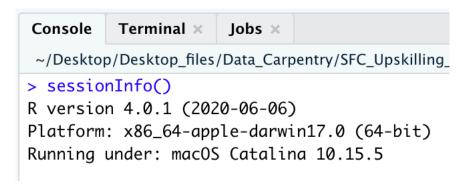
Before we start... <TROUBLESHOOTING> R (un/)install & setup

- Go to https://www.r-project.org/
- Go to the <u>download</u> link
- Choose your CRAN mirror nearer to your location (either <u>Bristol</u> or <u>Imperial College</u> London)
- Download the correspondent version depending if you are using Windows Mac or Linux
 - For Windows click on install R for the first time. Then download R 4.0.1 for Windows
 and follow the installation widget. If you get stuck follow this video tutorial
 https://www.youtube.com/watch?v=GAGUDL-4aVw
 - Form Mac Download R-4.0.1.pkg and follow the installation widget. If you get stuck follow
 this video tutorial https://www.youtube.com/watch?v=EmZqlcKkJMM
 - For Linux go on the correspondent subfolder and follow the normal path you do for installing new software. If you are using Ubuntu you can follow this guide
 https://www.youtube.com/watch?v=kF0-FH-xBiE

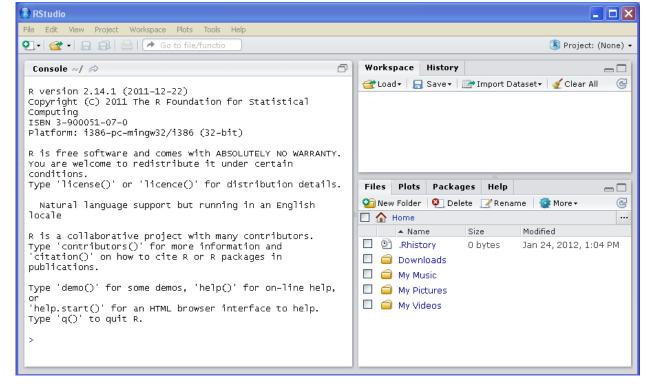
[Credit to Lucia Michielin]

+1 Uninstalling earlier R version, visit: https://cran.r-project.org/bin/windows/base/rw-FAQ.html#How-do-I-UNinstall-R 003f

- Once R is installed you can install R studio (R interface)
- Go to www.rstudio.com
- Go in download
- Download the correspondent version depending on your Operating system and install it.
- Open the R studio interface and if it is looking like this
- If you already using R/ RStudio: be sure they are upto-date!







[Credit to Lucia Michielin]

Download and unzip the data to a preferred working directory

https://ndownloader.figshare.com/articles/1314459/versions/9 [compressed files]

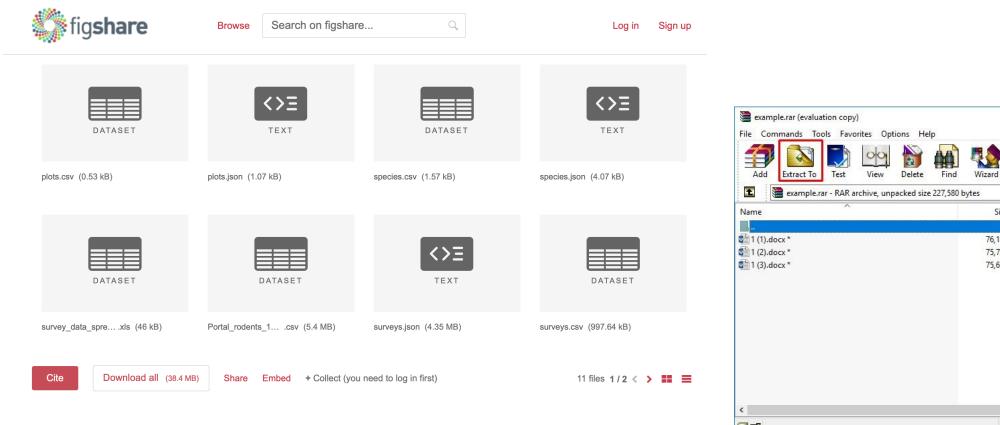
https://figshare.com/articles/Portal_Project_Teaching_Database/1314459

Brief

"The Portal Project Teaching Database is a simplified version of the Portal Project Database designed for teaching. It provides a real world example of life-history, population, and ecological data, with sufficient complexity to teach many aspects of data analysis and management, but with many complexities removed to allow students to focus on the core ideas and skills being taught."

Before we start... < TROUBLESHOOTING >

Get the data ready...



1. Download compressed files from online repository

2. Decompress (e.g. unzip) file(s) into preferred working directory

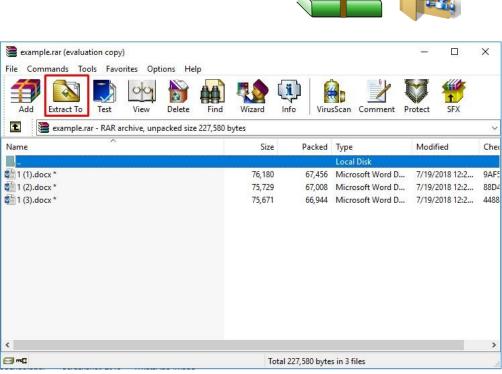


Image is for illustration only.

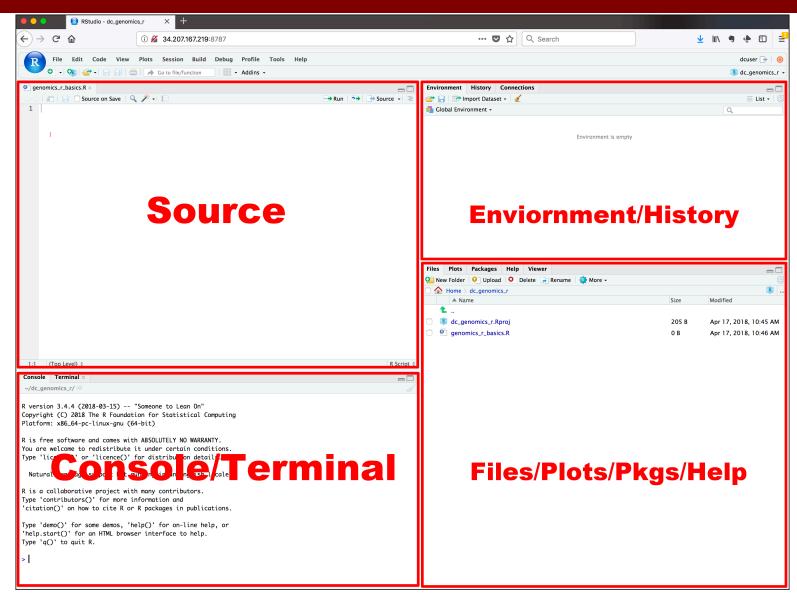
Before we start... Download R script handout...

R script handout download URL:

https://datacarpentry.org/R-ecology-lesson/code-handout.R

Before we start... Our working environment

Graphical User Interface (GUI)





RStudio IDE Cheatsheet

https://github.com/rstudio/cheatsheets/raw/master/rstudio-ide.pdf

Before we start... Some important keyboard shortcuts/ cheatsheets



RStudio keyboard shortcuts

[Menu bar/] Tools → Keyboard Shortcuts Help, e.g.:

- **Save**: Ctrl (Cmd) + S
- Execute/ run script or command/ instruction: Ctrl (Cmd) + Enter
- Autofill: press 'Tab'
- Comment single line/ multiple lines: Shift + Ctrl (Cmd) + C OR everything after the hash '#' symbol will be interpreted as a comment

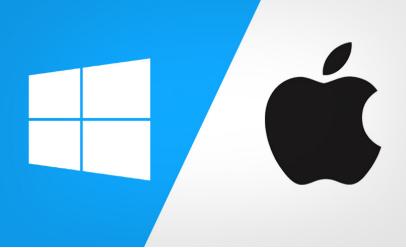
Cheatsheets

https://rstudio.com/resources/cheatsheets/



Before we start... Please be aware..





R/ RStudio can behave slightly differently when running on different OS (e.g. Windows vs UNIX [e.g. Mac or Linux] machines) and even on the same OS different software versions can 'surprise' us.