

Setup Instructions

You need to install and test R and RStudio before the workshop. Installation process is simple on all major platforms, and mostly consists of downloading and running the installers appropriate to your platform. Please contact the instructors if you run into difficulties so we can help you show up with a computer properly set up for the workshop.

R and RStudio

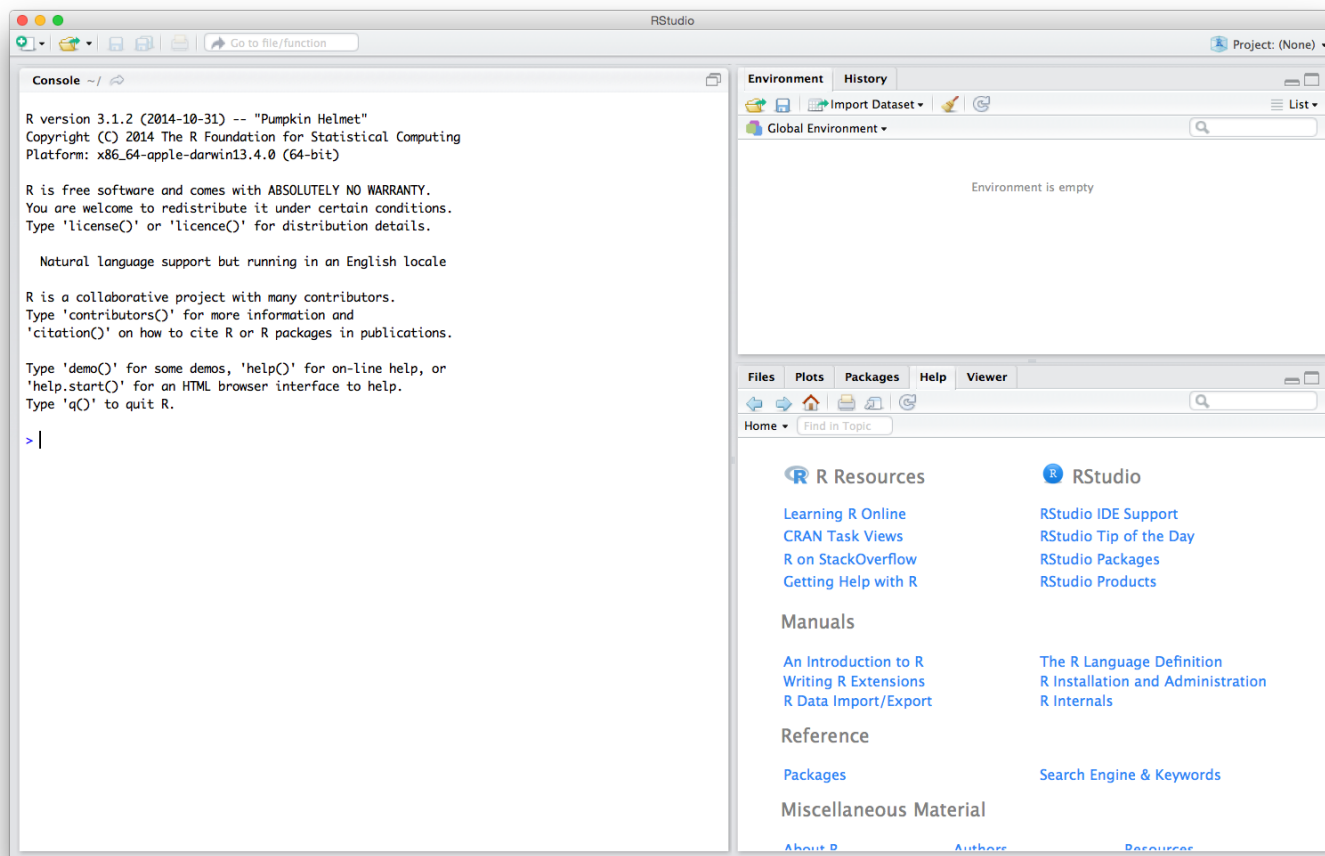
- Download and install R, a free software environment for statistical computing and graphics (<http://www.r-project.org>) from CRAN (<http://cran.rstudio.com>), the Comprehensive R Archive Network. It is *highly recommended* to install a precompiled binary distribution for your operating system – use the links up at the top of the CRAN page linked to above!

If you currently have R installed on your laptop please make sure it is version 3.2.0 or later (current release is 3.5.0). **Please update if it is not!**

- Install RStudio (<https://www.rstudio.com/products/rstudio/download/>), a powerful user interface for R.

Testing testing

- Do whatever is appropriate for your OS to launch RStudio. You should get a window similar to the screenshot below.



If you don't see a window that is divided into distinct areas labelled "Console", "Environment", etc., you are probably running the user interface that comes bundled with R. Check that RStudio is present in your applications and start it instead.

- Put your cursor in the pane labelled "Console", which is where you interact with the live R process. Create a simple object with code like `x <- 2 * 4` (followed by enter or return). In the "Environment" pane, to the right of the Console, you should see an entry for "x" with appropriate value (in this case, 8).
- Then inspect the `x` object by typing `x` in the Console followed by enter or return. Obviously you should see the value 8 print to screen.
- Finally, check that plotting works. In the console, type `plot(cars)`. If you see a scatterplot appear in the "Plots" pane, you are good to go.

Further resources

The above is enough preparation but here are some links if you are interested in reading a bit further.

- How to Use RStudio:
 - <https://support.rstudio.com/hc/en-us/sections/200107586-Using-RStudio> (<https://support.rstudio.com/hc/en-us/sections/200107586-Using-RStudio>)
- RStudio Public Discussion & Troubleshooting Guide:
 - <https://support.rstudio.com/hc/en-us/sections/203994097-RStudio-IDE> (<https://support.rstudio.com/hc/en-us/sections/203994097-RStudio-IDE>)
- How to Install R:
 - <http://cran.r-project.org/doc/manuals/R-admin.html> (<http://cran.r-project.org/doc/manuals/R-admin.html>)

- http://cran.stat.sfu.ca/doc/FAQ/R-FAQ.html#How-can-R-be-installed_003f
(http://cran.stat.sfu.ca/doc/FAQ/R-FAQ.html#How-can-R-be-installed_003f)
- R FAQ:
 - <http://cran.r-project.org/doc/FAQ/R-FAQ.html> (<http://cran.r-project.org/doc/FAQ/R-FAQ.html>)