

Preparing for your first session in R

R is a **free** software environment for statistical computing and graphics and runs on UNIX platforms, Windows and MacOS X. More importantly it is currently recognized as the standard for doing statistics replacing even very costly commercial software. For more praise, see for instance [The New York Times](#) or the [Revolutionanalytics website](#). We will use this software every week in our course.

If you are not already familiar with R, the instructions below might be useful a “step by step” to get you started.

NB: You can also consult the FAQ page on the R website (URL below) or any “Getting started with R” document on the web (just google it). You will rapidly find out that a lot is available on the web as the community of R users has grown enormously in the last 5 years.

1. Downloading and installing R

R is available for download from the net and is freely obtained under the GPL license <http://www.r-project.org/>

Look for “Download and install R” get the binaries

File name should look something like

The binary for MacOSX

R-.....pkg (latest version Mac)

Binary for Base distribution (**R-... for Windows (32/64 bit))**

R-...-win.exe (PC)

Once you have downloaded the binary you just install it on your Mac/ PC

2. Download and install Rstudio

<http://www.rstudio.com/ide/download/>

3. Open Rstudio

Open the R_session exercise file and start working

4. Print/Open the cheatsheets for help

5. Creating a brand new script

Use the Menu **File/New** and save the blank file in your favorite directory (as “ANameYouCanRememberLater.R”).

6. Running a line (several lines) of command from a script :

Select the section of the script you want to run
copy and paste in the console window (BAD)

or

use the “run” command (Command + Enter in Macs or Ctrl + Enter in PCs)

It is enough to have the cursor on the line of interest, then press Command/Ctrl + Enter – in this manner you can quickly go through a script and execute the code “on the go”.

8. Downloading and installing a package

Packages contain extra functionalities and dataset in R.

To install a package:

You can run the command line below in the R console

(the “>” below denotes the prompt of the console: you do not have to type that “>” in):

```
> install.packages("abd")
```

or, you use the Menu driven interface in R studio (Tools/Install).

Choose the option “Install from” Repository (here CRAN because the ABD package is available from CRAN) and click the option “install dependencies”.

This is very useful as it will ensure --in principle-- that extra packages needed by the package you aim to install are also installed.