ASDS Code Camp – Monday Homework

Installing R

R is a programming language used for statistics. It is completely free and can be downloaded from CRAN, the comprehensive R archive network.

- 1. Go to https://cran.r-project.org/
- 2. In the box headed "Download and Install R", click the link corresponding to your operating system.
- 3. On the next page, follow the instructions for your system (these will vary according to whether you have a Mac, a Windows PC, or a Linux system).

The process for downloading R is fairly straightforward. If you meet with any difficulties, we will try to fix them in tomorrow's class.

<u>Installing R Studio</u>

R is a programming language. Once you have downloaded R, you can programme with it by opening the shortcut, which you should be able to find in the "R" folder in your start menu (Windows), or Applications folder (Mac). It will have a name something like "R x64 4.2.1". If you open this, you will see a window titled "RGui", and inside this another window titled "R console". You enter commands in the console window, which R then executes.

For many reasons, using the console to programme with R is undesirable. Instead, most people use an IDE, which stands for integrated development environment. IDEs allow us to organise our workflow, and can help with debugging code and other things. There are many IDEs available for R, but a very commonly used IDE is R Studio. R Studio is also free for non-commercial use. To download R Studio:

- 1. Go to https://www.rstudio.com/products/rstudio/download/
- 2. Scroll down to "R Studio Desktop (Open Source License) Free" and click the "download" box underneath. This should direct you to the download page for your version.
- 3. Follow the instructions for your system.

Again, the process for downloading is fairly simple, but if you have any problems we will address them in tomorrow's class.

Some useful links for R

If you have a problem in R (and you will have many, many problems in R), the good news is that many, many people will have faced the same problem before you, and someone will have helped them solve it. Stack overflow (stackoverflow.com) is a good repository of such knowledge. Rstudio.com has some helpful cheat sheets which are free to download. R-bloggers.com has many tutorials.