

Installing Packages in R

The first few lines of each Assignment script file will contain lines as in Figure 1. These lines install the necessary packages to do the analysis for each analysis assignment. In the figure, the lines load the “lattice” package, which is necessary to do the dot plots.

```
# ##### ESSENTIAL CODE TO BEGIN EACH LAB #####  
# Some assignments will require you to use 'packages', separate sets of commands  
# that you download and install.  
# These 3 lines of code below must be loaded prior to the lab, or else the lab commands won't work:  
lab1.packages <- c('lattice') # creates an object that contains lattice, a graphics package  
install.packages(pkgs=lab1.packages) # installs the packages stored in the object  
library(lattice) # Calls the lattice package into memory with library()
```

Figure 1: The “ESSENTIAL CODE” lines will install the function “lattice” that we will use in the analysis.

So at the beginning of each lab, you should look for these lines in the script file. If you are working on your own computer, once you download and install the packages (with the `install.packages()` function), then the packages will remain on your own installed version of R. For each additional time you use the package commands, you only have to run the third line, `library()` which calls the package into memory. On the campus computer labs, you have to run all three lines each time you do the lab assignment.

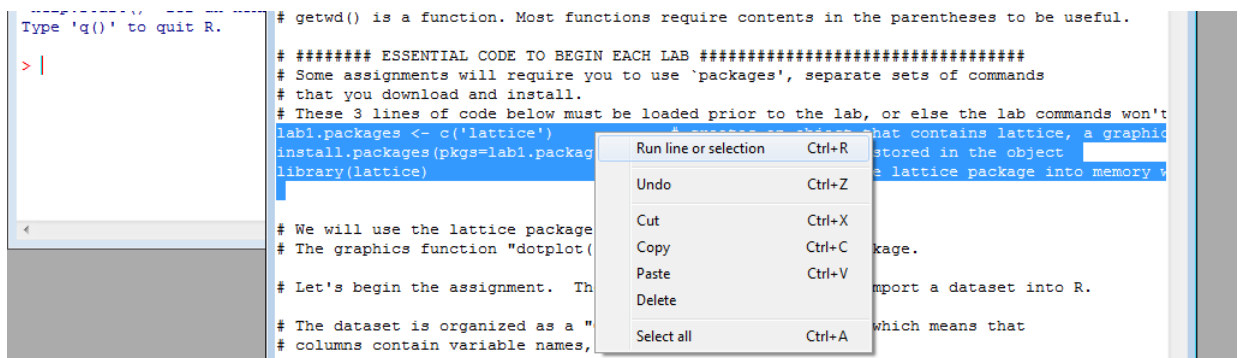


Figure 2: Run the package lines at the beginning of each analysis session.

After you run the lines, you may be asked to select a “Mirror”. the Mirror directs you to a place where the packages are stored to be safely downloaded to your computer. You’ll need to select a source for the mirror. I suggest you scroll

down the list to the USA, and choose the US(IA) — the mirror location in Iowa. (There's one in Michigan maintained by Michigan Tech, but it seems to have problems.) What the mirror selection looks like appears in Figure 3. Click 'OK'. And then the package should download.

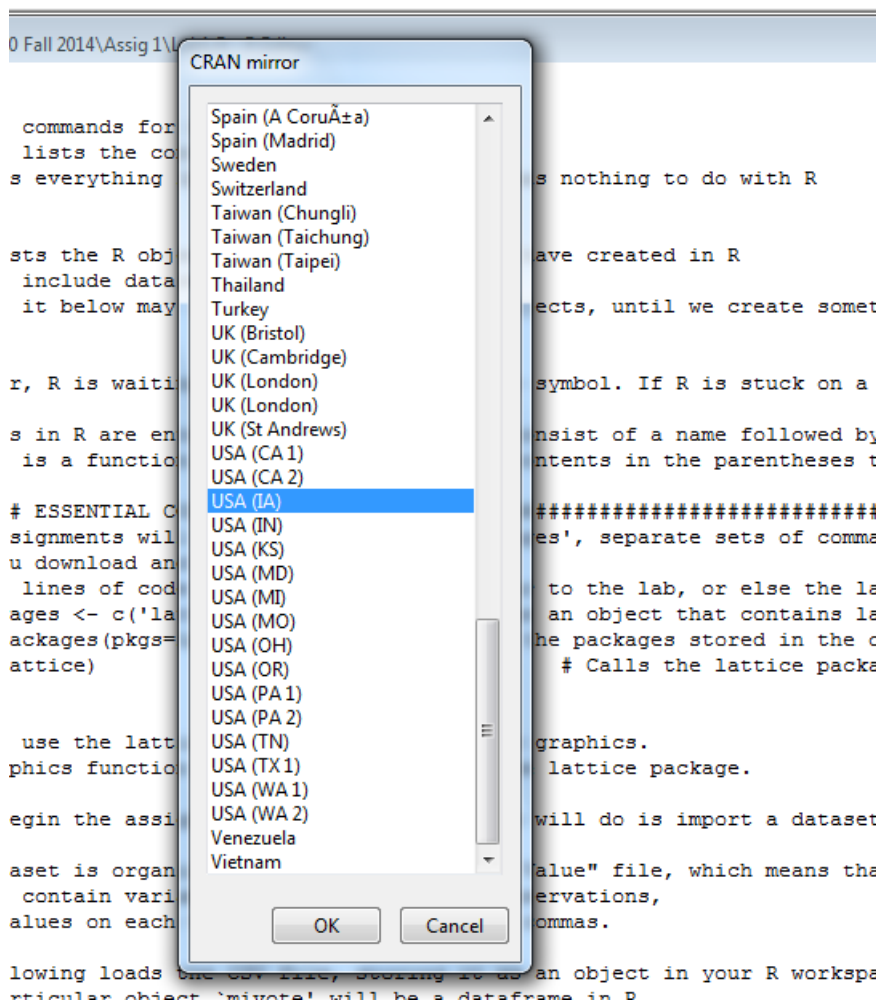


Figure 3: Select a mirror to download the package. Scrolling down to the mirror in Iowa is a good choice.

It's possible you might see a "Warning message", about the version of R within which the 'lattice' package was created. But don't worry about that – it doesn't affect us and just points out the version of R within which the function was written.