## 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 assigment. In the figure, the lines load the "lattice" package, which is necessary to do the dot plots.

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.

Type 'q()' to quit R.	<pre># getwd() is a function. Most functi</pre>	ions require conter	nts in th	ne parentheses to be useful.		
>	<pre># ######## ESSENTIAL CODE TO BEGIN EACH LAB ###################################</pre>					
	lab1.packages <- c('lattice') install.packages(pkgs=lab1.packag	Run line or selection	Ctrl+R	hat contains lattice, a graphic stored in the object		
	library(lattice)	Undo	Ctrl+Z	e lattice package into memory v		
<	# We will use the lattice package	Cut	Ctrl+X			
	# The graphics function "dotplot(	Сору	Ctrl+C	kage.		
	# Let's begin the assignment. Th	Paste Delete	Ctrl+V	mport a dataset into R.		
	<pre># The dataset is organized as a " # columns contain variable names,</pre>	Select all	Ctrl+A	which means that		

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.

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Figure 3: Select a mirror to download the package. Scrolling down to the mirror in lowa 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.