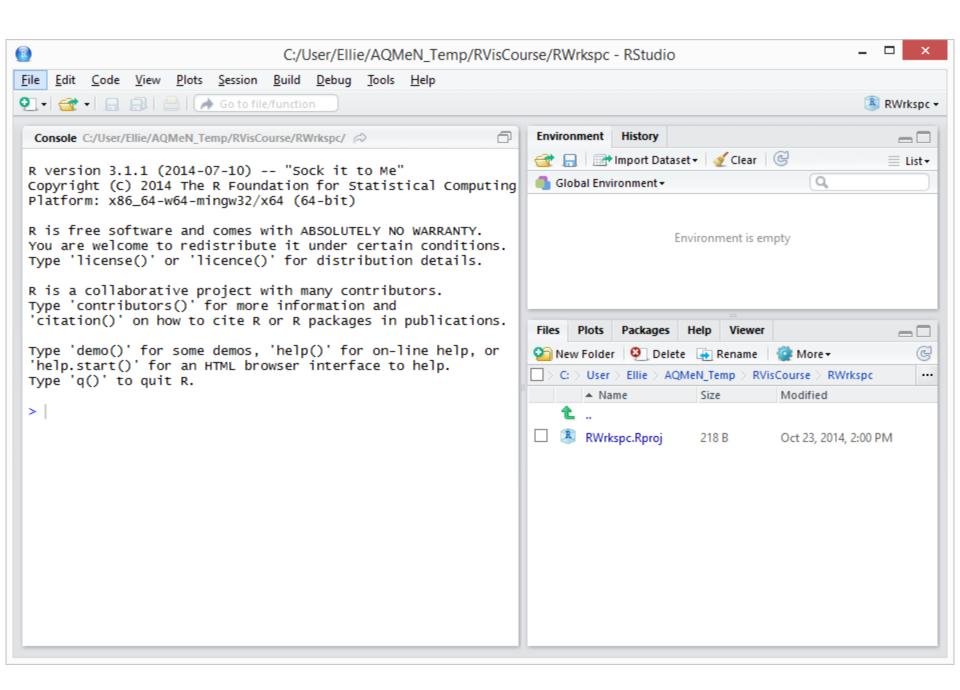
Quick Guide to loading data and packages

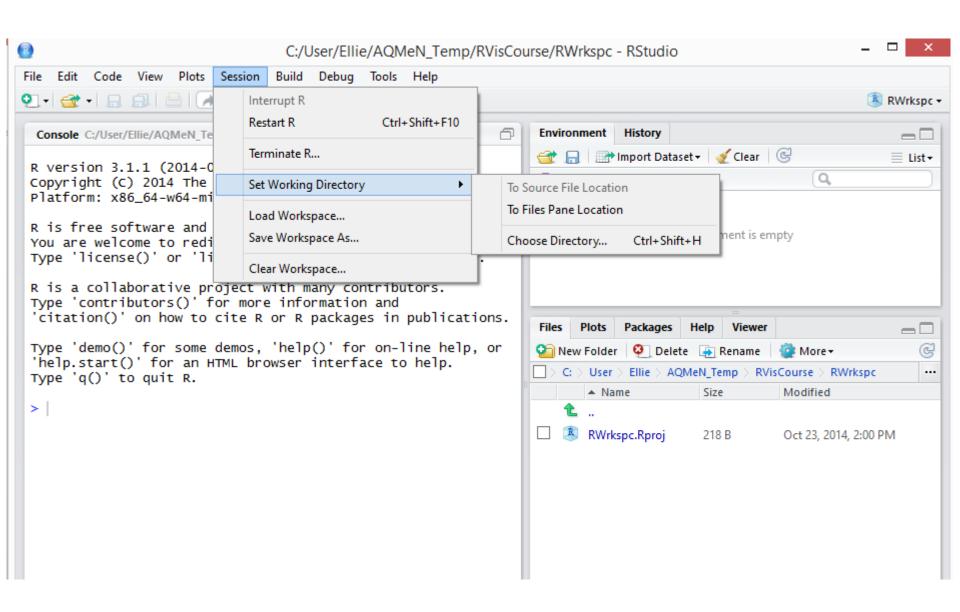
Getting going with R
And R Studio
If you are not already
familiar with R

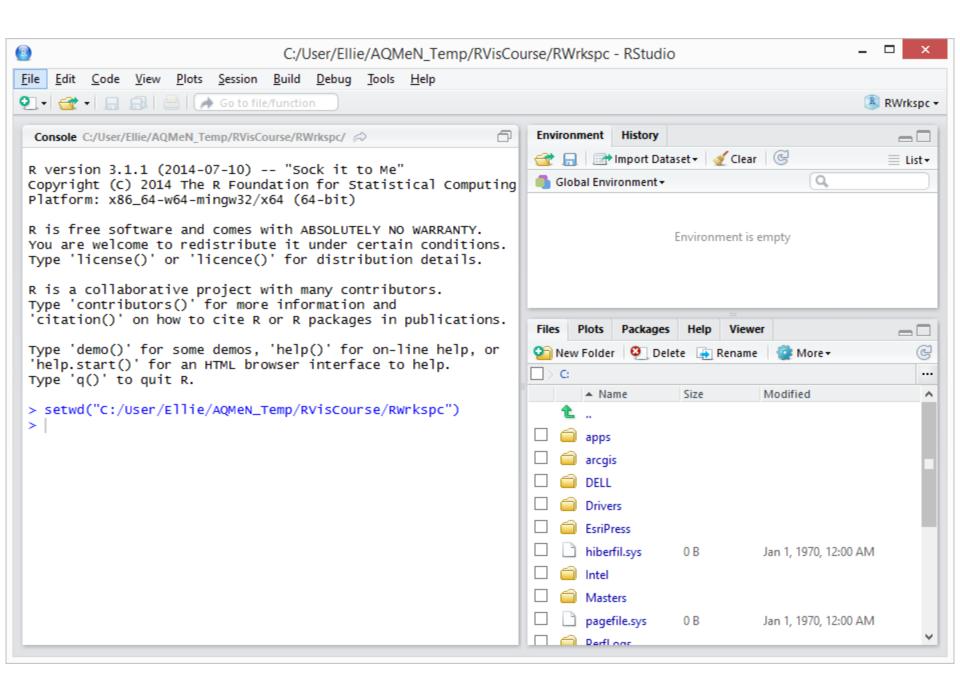
Install R and R Studio Open R Studio

It will look a bit like this

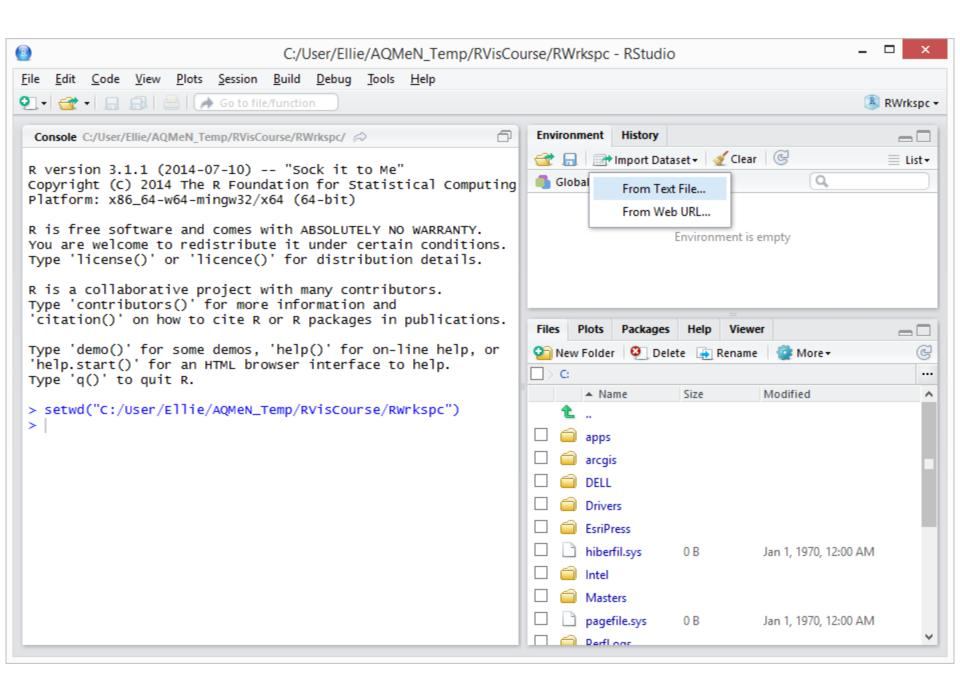


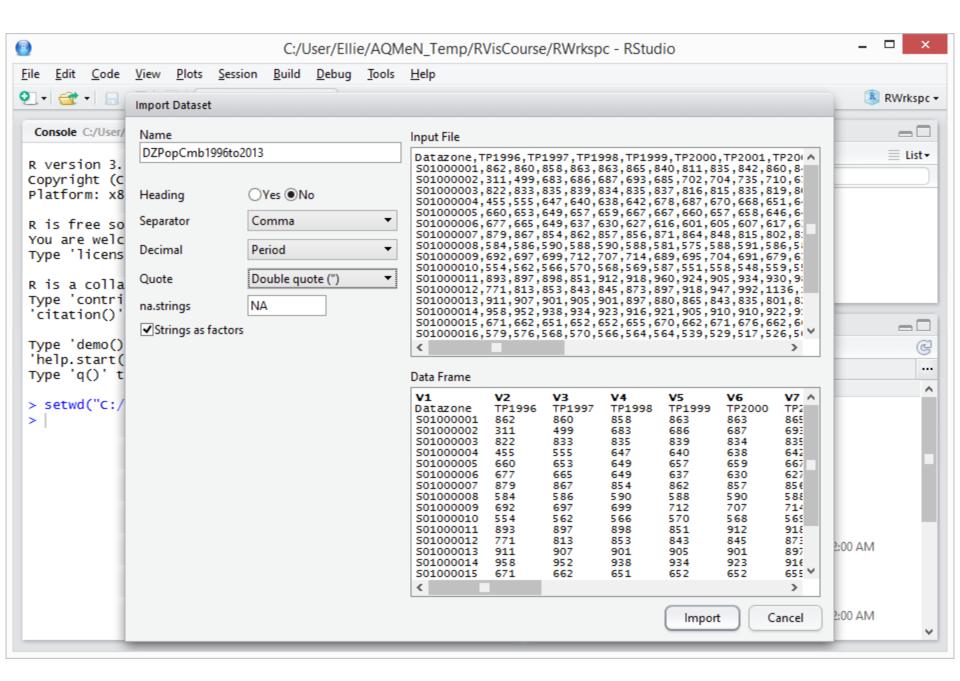
Set the working directory

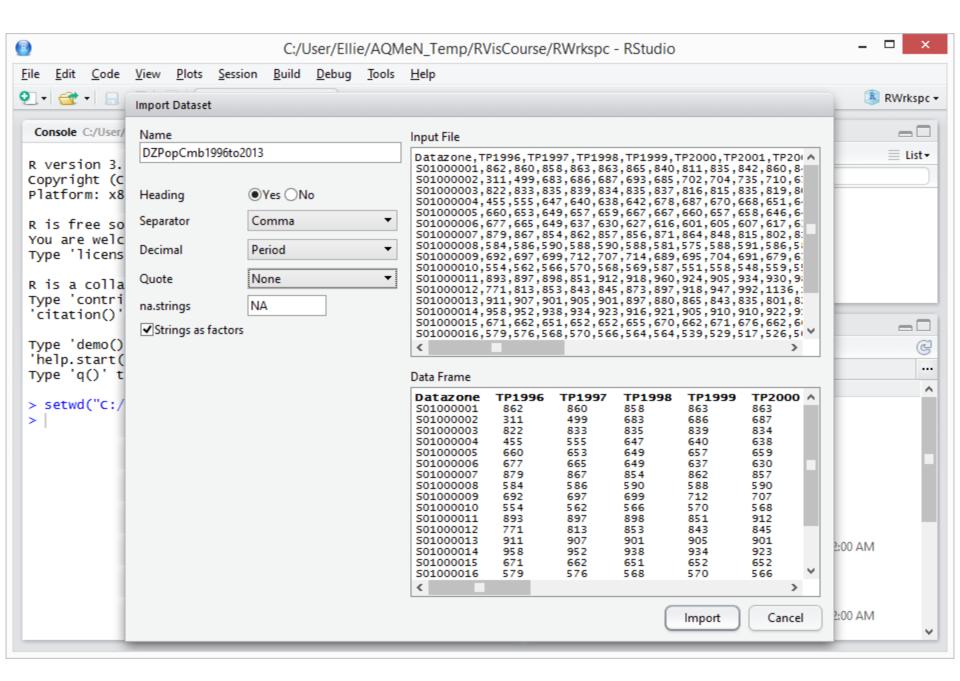


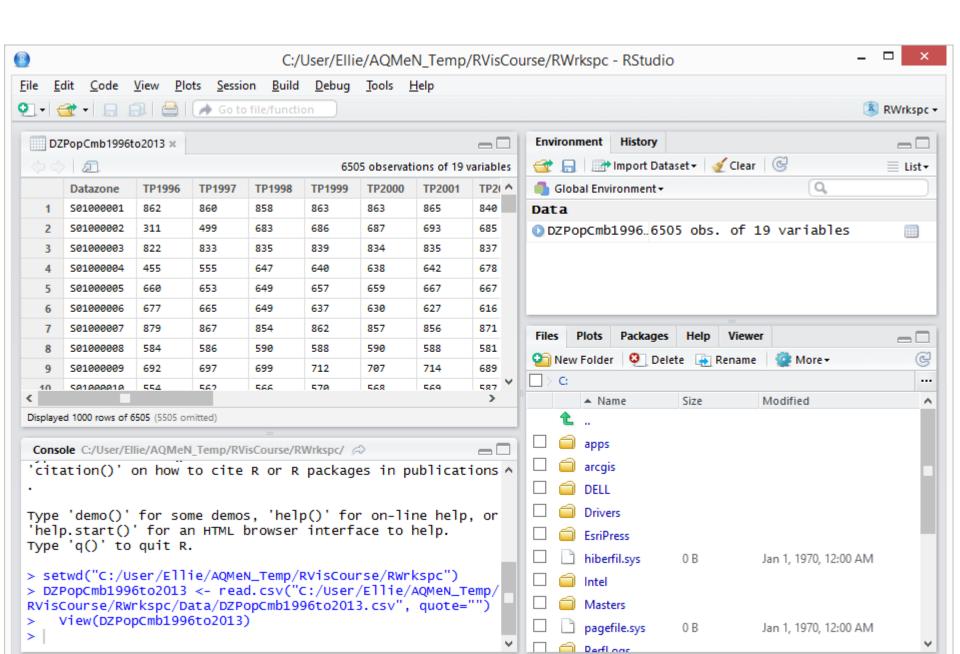


Load some data



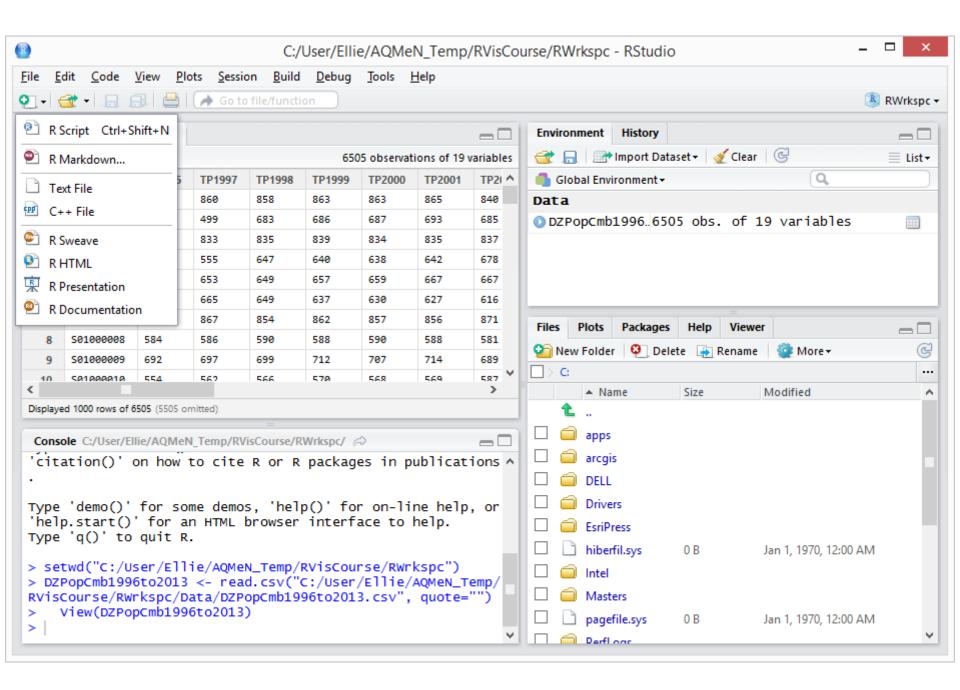


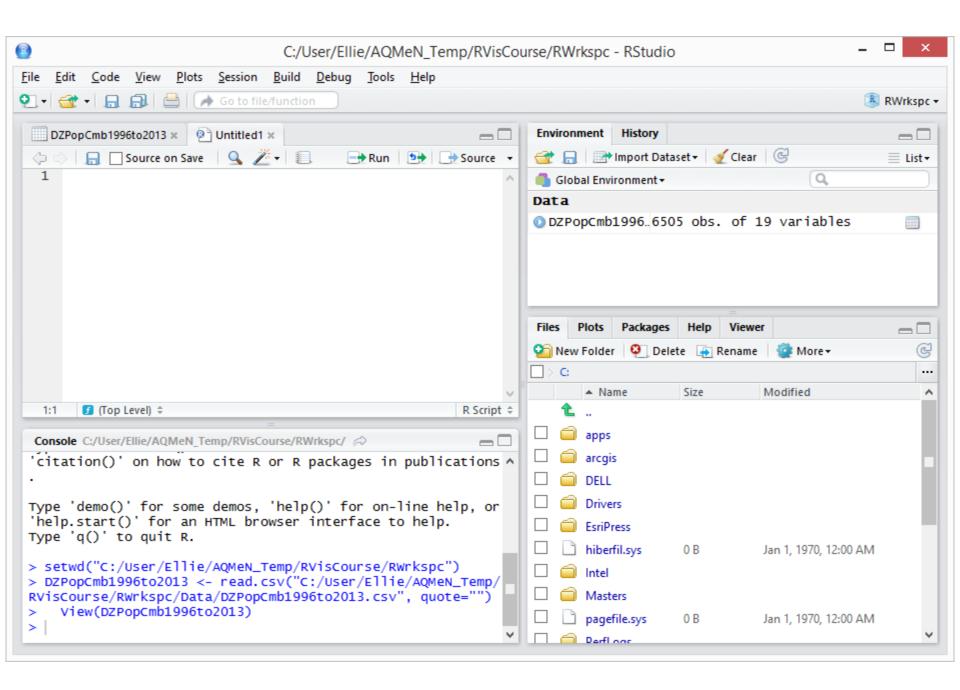




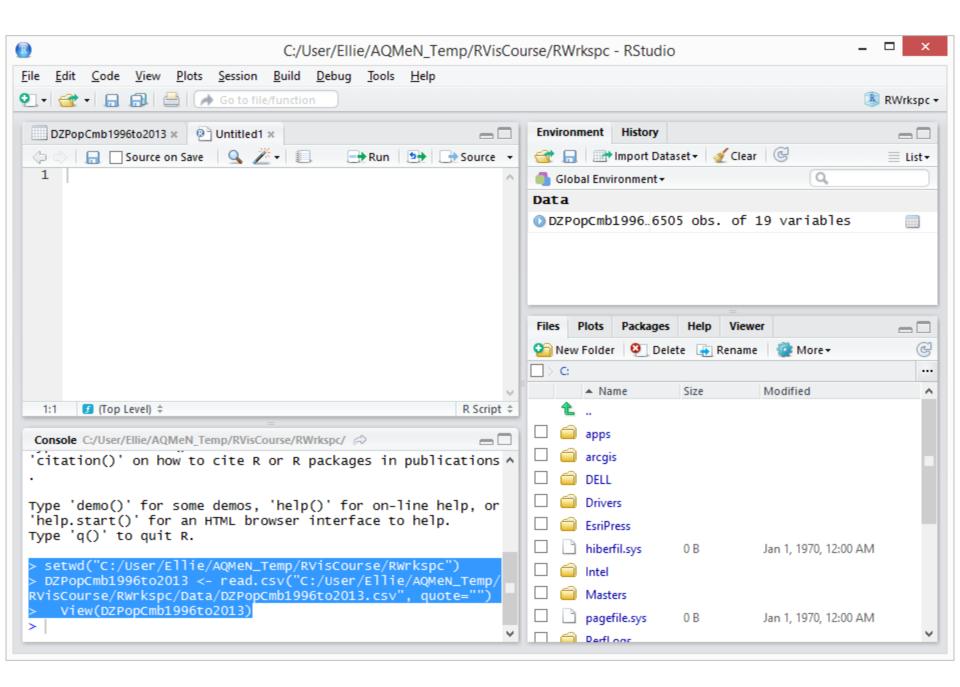
Open a new blank script file

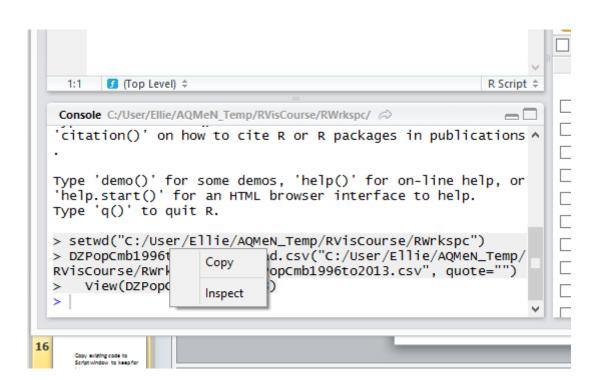
Click the little green plus button B C:/User/Ellie/AQMeN Temp/RVisCourse/RWrkspc - RStudio <u>F</u>ile Session Build Debug Tools Help View RWrkspc + Go to file/function DZPopCmb1996to2013 × $\neg\Box$ Environment History =☐ Import Dataset → 📝 Clear 🤘 2 6505 observations of 19 variables ≡ List ▼ Q Datazone TP1996 TP1997 TP1998 TP1999 TP2000 TP2001 TP2(^ 📑 Global Environment 🕶 501000001 862 863 865 840 860 858 863 Data 501000002 311 499 683 686 687 693 685 ODZPopCmb1996.6505 obs. of 19 variables 501000003 822 833 835 839 834 835 837 455 555 642 501000004 647 640 638 678 501000005 660 653 649 657 659 667 667 501000006 677 665 649 637 630 627 616 879 871 501000007 867 854 862 857 856 **Packages** Files Plots Help Viewer 501000008 584 586 590 588 590 588 581 New Folder 👂 Delete 👍 Rename C 🍱 More 🕶 501000009 692 697 699 712 707 714 689 > C: ... 10 501000010 554 562 566 570 568 560 527 > Name Size Modified Displayed 1000 rows of 6505 (5505 omitted) Console C:/User/Ellie/AQMeN_Temp/RVisCourse/RWrkspc/ A 'citation()' on how to cite R or R packages in publications ^ arcgis DELL Drivers Type 'demo()' for some demos, 'help()' for on-line help, or 'help.start()' for an HTML browser interface to help. EsriPress Type 'q()' to quit R. hiberfil.svs 0 B Jan 1, 1970, 12:00 AM > setwd("C:/User/Ellie/AQMeN_Temp/RVisCourse/RWrkspc") Intel > DZPopCmb1996to2013 <- read.csv("C:/User/Ellie/AQMeN_Temp/</pre> RVisCourse/RWrkspc/Data/DZPopCmb1996to2013.csv", quote="") Masters View(DZPopCmb1996to2013) 0 B pagefile.sys Jan 1, 1970, 12:00 AM > Derfl ogs

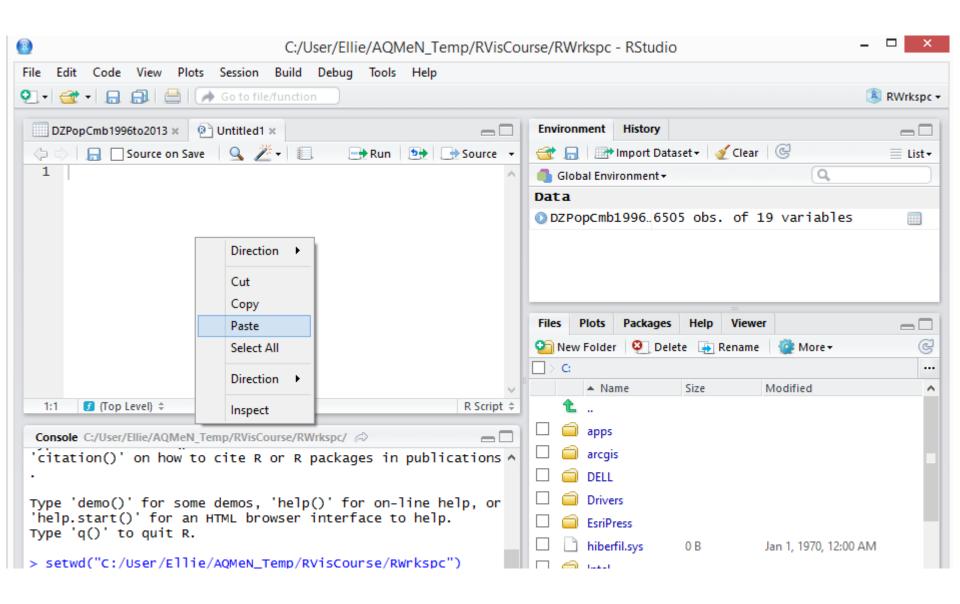




Copying existing code to Script window to keep for later

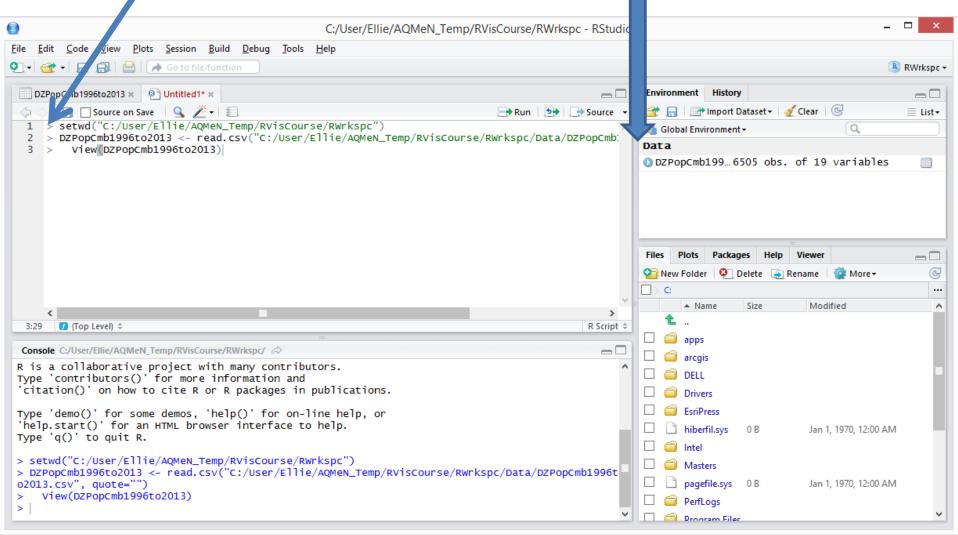






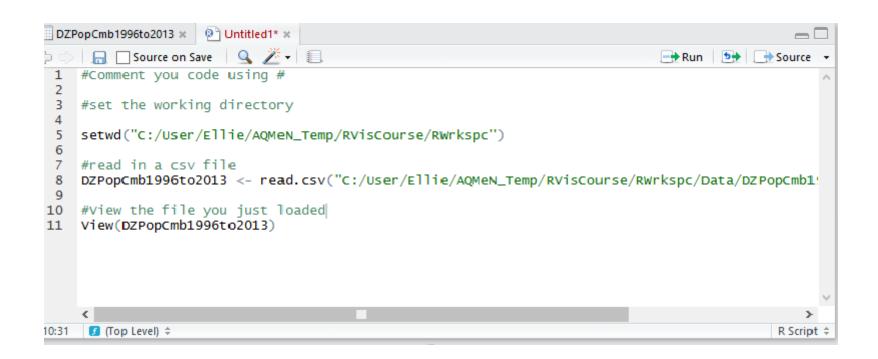
You need to delete the > at the start of the code before you use it / save it

You can expand windows

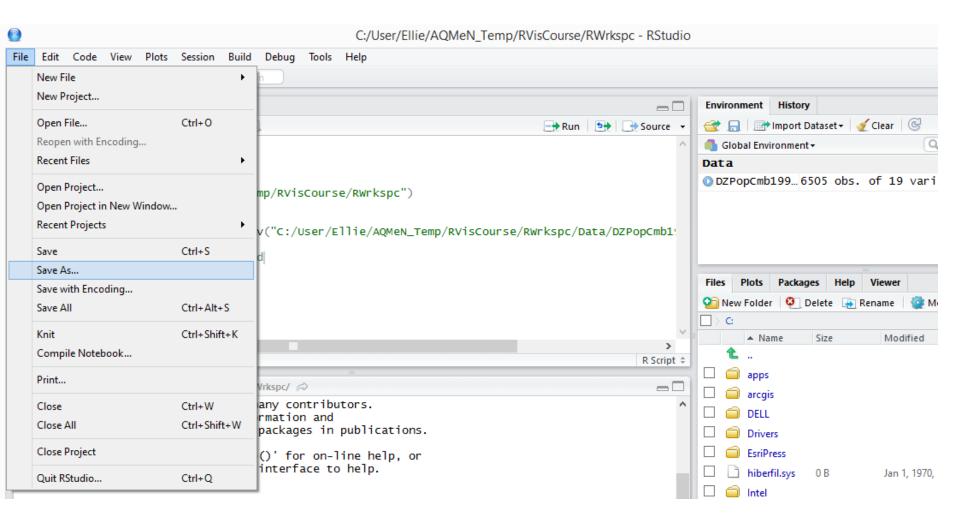


Comment code

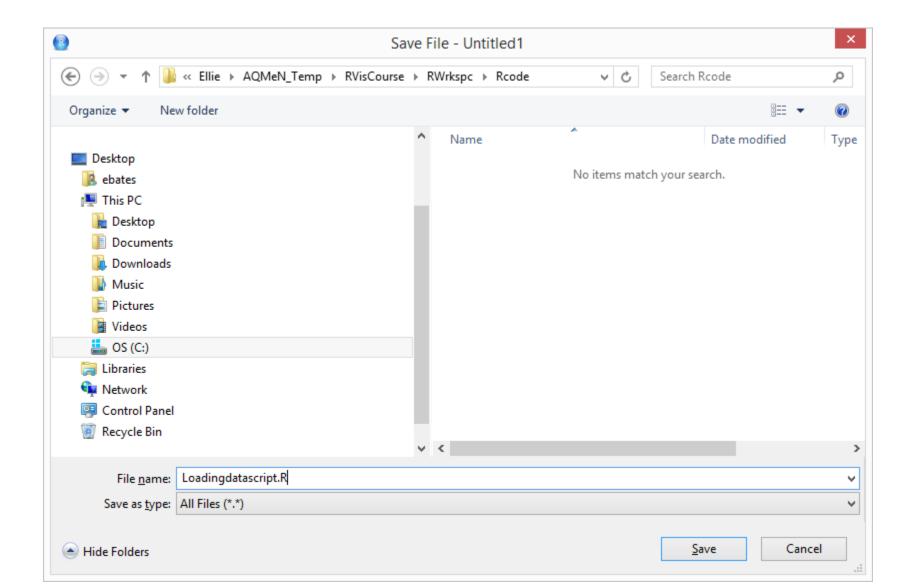
Comment your code with # at the start



Save script for loading your data

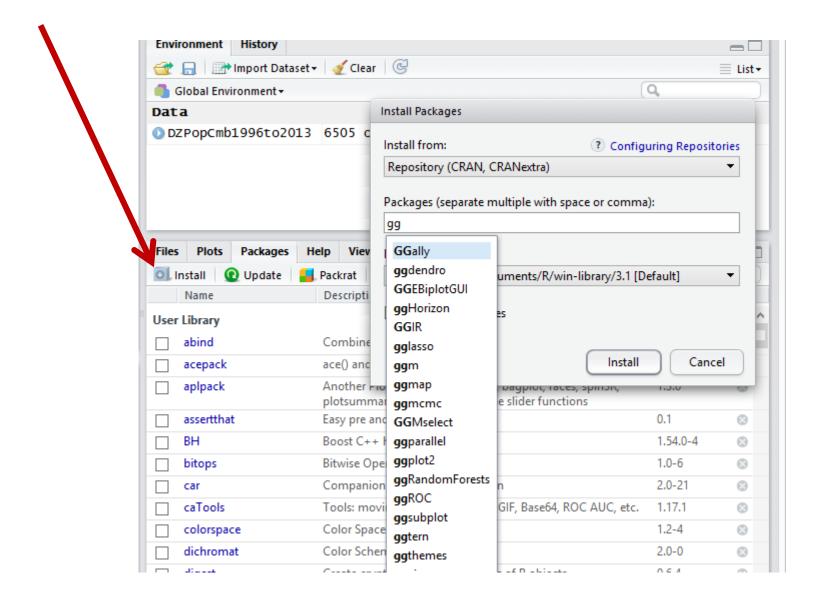


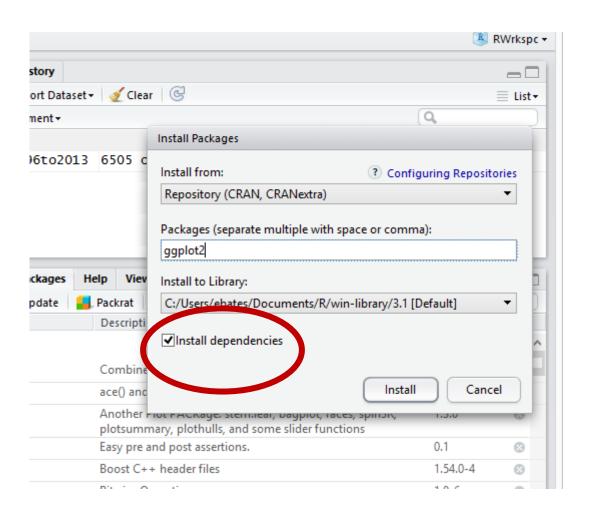
Give you R script the file extension .R



Installing your package

Click on the Packages tab and click the install button – the Install Packages window appears





Make sure Install dependencies is ticked and click install

The code to install packages

```
Console C:/User/Ellie/AQMeN Temp/RVisCourse/RWrkspc
se/RWrkspc/Data/DZPopCmb1996to2013.cm
                                          quote="")
    View(DZPopCmb1996to2013)
> install.packages("ggplot2")
Installing package into 'C:/Users/ebates/Documents/R/win-library/3.
1'
(as 'lib' is unspecified)
trying URL 'http://cran.rstudio.com/bin/windows/contrib/3.1/ggplot2
_1.0.0.zip'
Content type 'application/zip' length 2673292 bytes (2.5 Mb)
opened URL
downloaded 2.5 Mb
package 'ggplot2' successfully unpacked and MD5 sums checked
The downloaded binary packages are in
 C:\Users\ebates\AppData\Local\Temp\RtmpsTnhPA\downloaded_packages
>
```

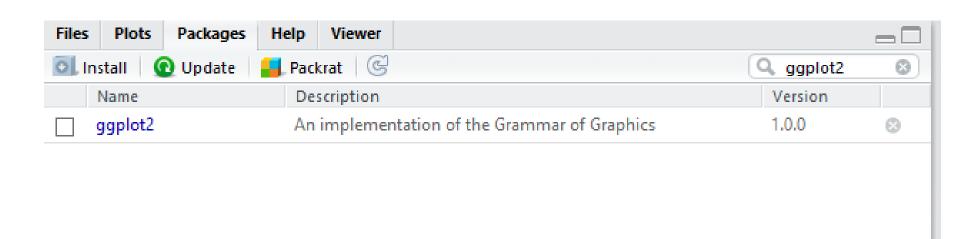
Messages from R as it is downloading the package (in red)

Messages saying package is downloaded (in black)

Load your package

You can use require()
Or
library()
Or R Studio GUI

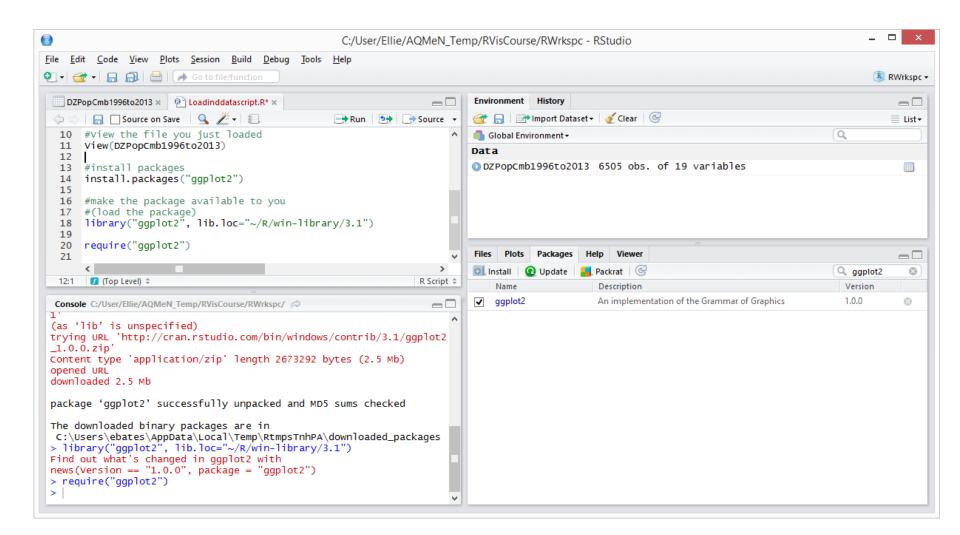
In the packages tab type the name of library you want. Tick the package



```
DZPopCmb1996to2013 ×

□ Loadinddatascript.R* ×

                                                 Run 🖘 Source
 10 #View the file you just loaded
                                                      Run the current
  11 View(DZPopCmb1996to2013)
                                                      line or selection
  12
                                                      (Ctrl+Enter)
  13 #install packages
      install.packages("ggplot2")
  14
  15
  16 #make the package available to you
      #(load the package)
  17
      library("ggplot2", lib.loc="~/R/win-library/3.1")
  18
  19
      require("ggplot2")
  20
  21
  20:1
       (Top Level) $
                                                                R Script $
 Console C:/User/Ellie/AQMeN_Temp/RVisCourse/RWrkspc/ 🗇
Installing package into 'C:/Users/ebates/Documents/R/win-library/3.
1'
(as 'lib' is unspecified)
trying URL 'http://cran.rstudio.com/bin/windows/contrib/3.1/ggplot2
_1.0.0.zip'
Content type 'application/zip' length 2673292 bytes (2.5 Mb)
opened URL
downloaded 2.5 Mb
package 'ggplot2' successfully unpacked and MD5 sums checked
The downloaded binary packages are in
 C:\Users\ebates\AppData\Local\Temp\RtmpsTnhPA\downloaded_packages
> library("ggplot2", lib.loc="~/R/win-library/3.1")
Find out what's changed in ggplot2 with
news(Version == "1.0.0", package = "ggplot2")
| > |
```



Troubleshooting and finding out more about packages

