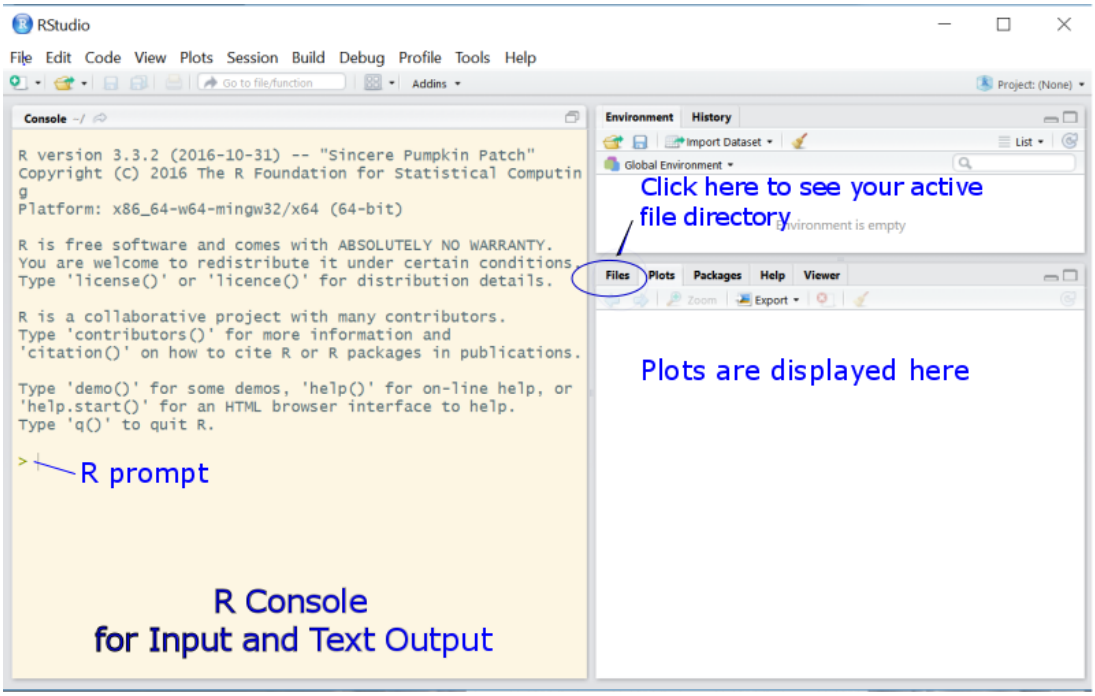
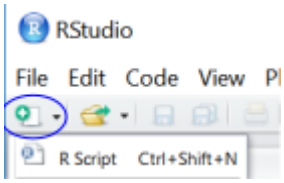
Quick Introduction to RStudio for Running R Programs

1. Download, Install R (from the Berkely server): https://cran.cnr.berkeley.edu
2. Download, Install RStudio: https://www.rstudio.com/products/rstudio/download3/
3. Run RStudio

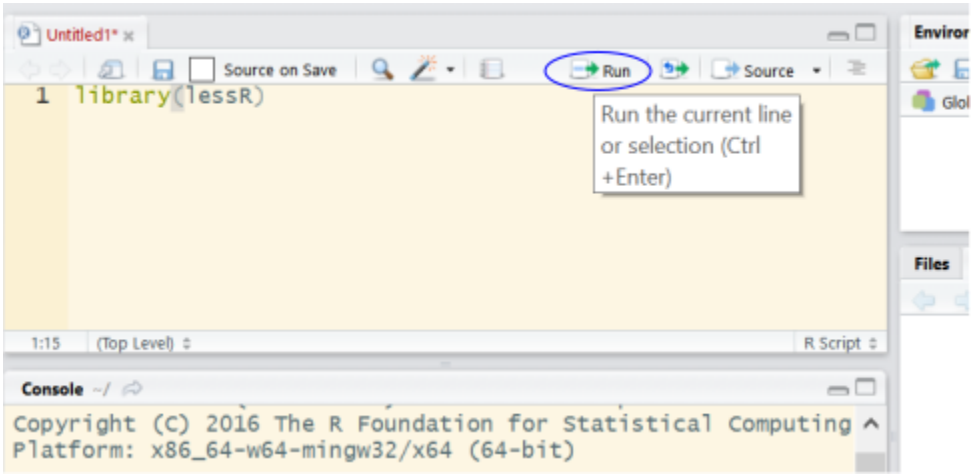
Just the R Console appears when the R app is run by itself, that is, *not* within the RStudio environment. The figure below shows what opens the first time RStudio is run. You get the *same* R Console from the R app, and you get more. You are running R either way.



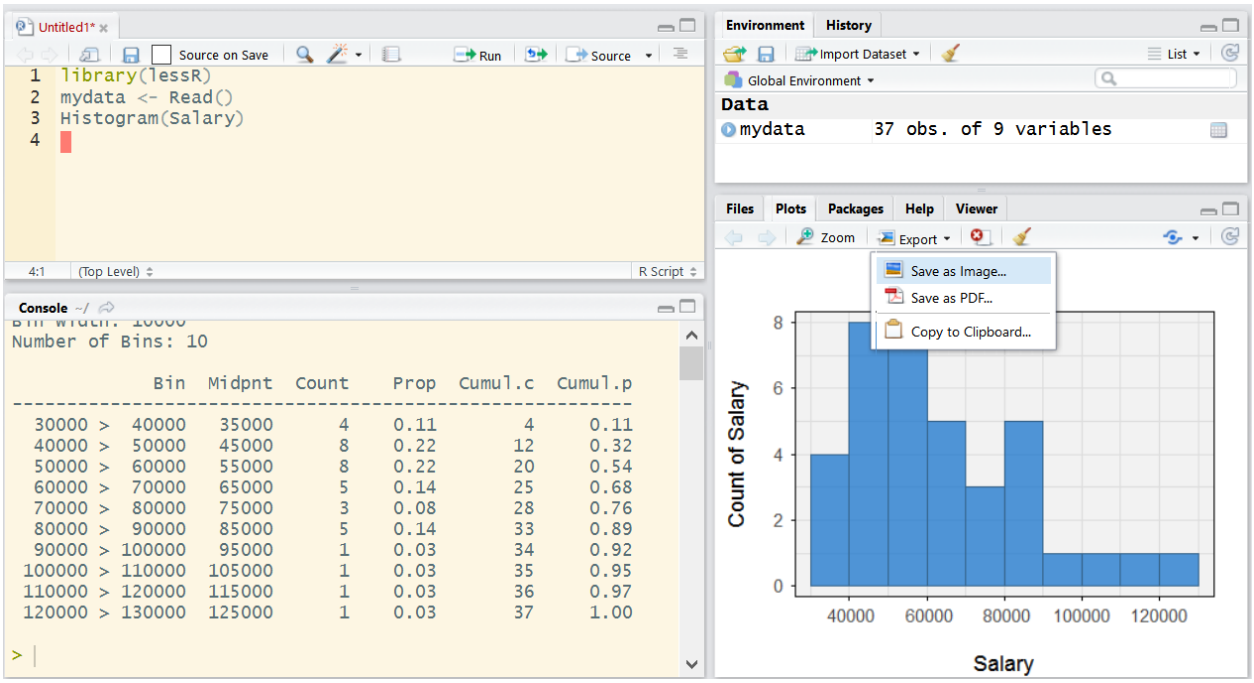


You can enter text directly into the R Console in response to the R prompt, >, but better to save your work for use in the future (i.e., reproducible). To save your input, such as for each homework assignment to use again with slight modification for your Project, enter your R commands into a separate text file and then save. The easiest way to do that is from within RStudio. Open a simple text file called an R script file by choosing the New File icon at the top-left, then choose R Script.

RStudio can copy R commands from this text file and insert them into the R console *as if* you were manually entering commands yourself directly into R. These commands are simple function calls. Type the relevant R function calls into the text file. To run an R command, put the cursor on the line of the command and then click the Run button at the top of the file window. Or just press CTRL-Enter.



In the next figure data was read, and a histogram created, with the lessR Histogram function. You need to move each graph that you generated to a MS Word or similar word processor document. To copy the graph to the clipboard, choose the Export option at the top of the Plots window. Then copy to the clipboard and paste into the word processor of your choice for your report.



Also copy and paste the R input that generated the graph, and any relevant text output into your report as well. For some reports the R input would be placed in an appendix. For homework, probably better to list the input next to the text and/or graphic output. However, when you paste any text from the R console into your document do format as monospaced. Use something like Courier New 9-point for R input/output copied from the R console, which both separates computer output from your writing and also lines up columns from any tabular output. Also, resize your plots as small as is feasible and still maintain legibility.