RStudio

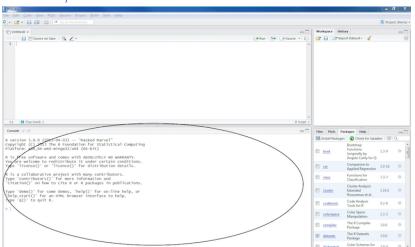
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January 4, 2016

RStudio

- "RStudio is an integrated development environment (IDE) for R."
- It helps the user use R.
- R, in essence is just the a console that takes commands from you typing into it
- ▶ Is NOT dropdown statistical tools (such as Stata)
- ► Snapshots taken from http://ayeimanol-r.net/2013/04/21/289/

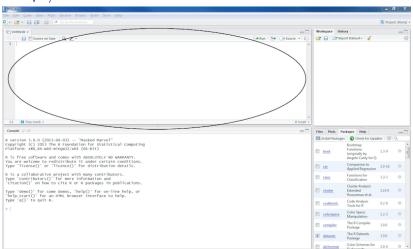
RStudio/R Console



RStudio/R Console

- Where code is executed (where things happen)
- You can type here for things interactively
- Code is **not saved** on your disk

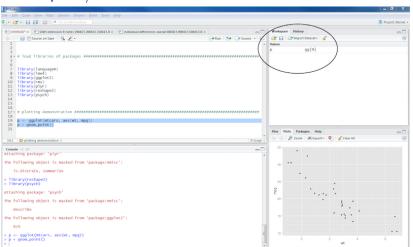
Script/Editor



RStudio/R Script/Rmarkdown files

- Where files open to
- Have R code and comments in them
- Can highlight and press (CMD+Enter (Mac) or Ctrl+Enter (Windows)) to run the code
- Code is saved on your disk

Workspace/Environment



Workspace/Environment

Workspace/Environment

- ► Tells you what **objects** are in R
- What exists in memory

History

Shows previous commands. Good to look at for debugging, but don't rely on it as a script. Make a script!

Other Panes

- ► **Files** shows the files on your computer of the directory you are working in
- ▶ **Viewer** can view data or R objects
- ▶ **Help** shows help of R commands
- Plots pretty pictures

Other Panes - packages

- Packages list of R packages that are loaded in memory
 - Packages are a set of functions written by R users
 - We write packages some are good, some are not so good
- ▶ Think of them as "R Extensions"
- ▶ If they extend R, when you download R from CRAN, we (and others) refer to things as "base R"
 - We will show you how to do some things in base R, but also show you some newer (and more intuitive) ways to do things
 - You need base R, however, because when you Google for answers, they are commonly answered without any additional packages.

Hadey Wickham

- Previous Assistant Professor of Statistics at Rice University
- Writes many R packages
- One authority on all things R
- Employee and Developer at RStudio
- ▶ I (John) trust almost all his packages
 - How to trust an R package: http://simplystatistics.org/2015/11/06/ how-i-decide-when-to-trust-an-r-package/