

RStudio & R Notebooks Overview

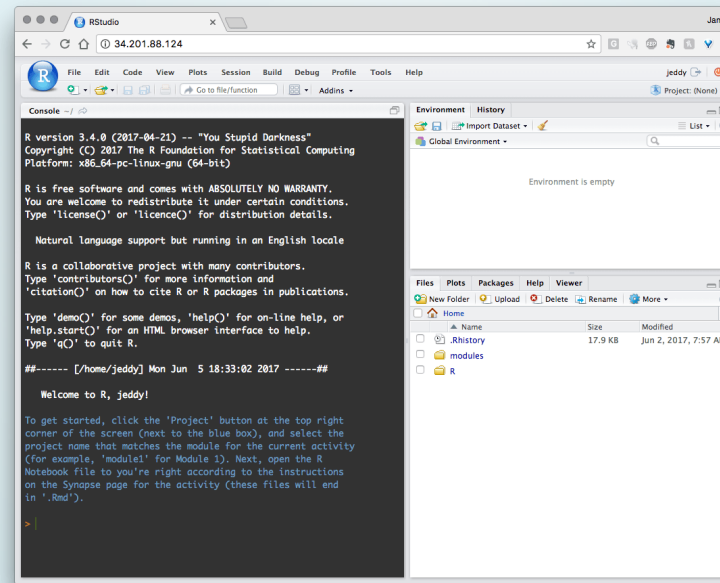
James Eddy – Sage Bionetworks

June 7, 2018

RStudio

What is RStudio?

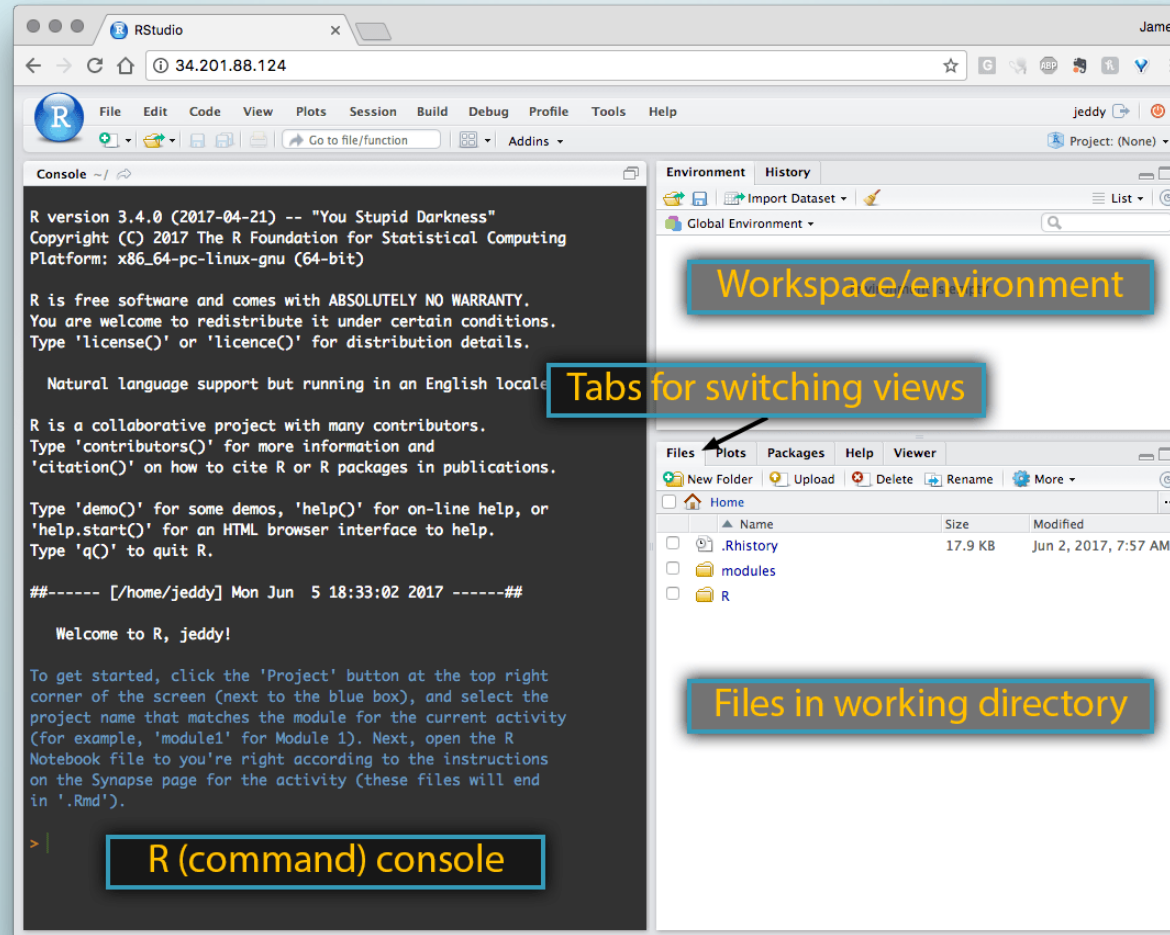
- **RStudio** is an Integrated Development Environment (IDE): create, view, and explore code, variables, files, plots, etc. all in one application



- RStudio also provides lots of helpful features and packages that make writing R code easier

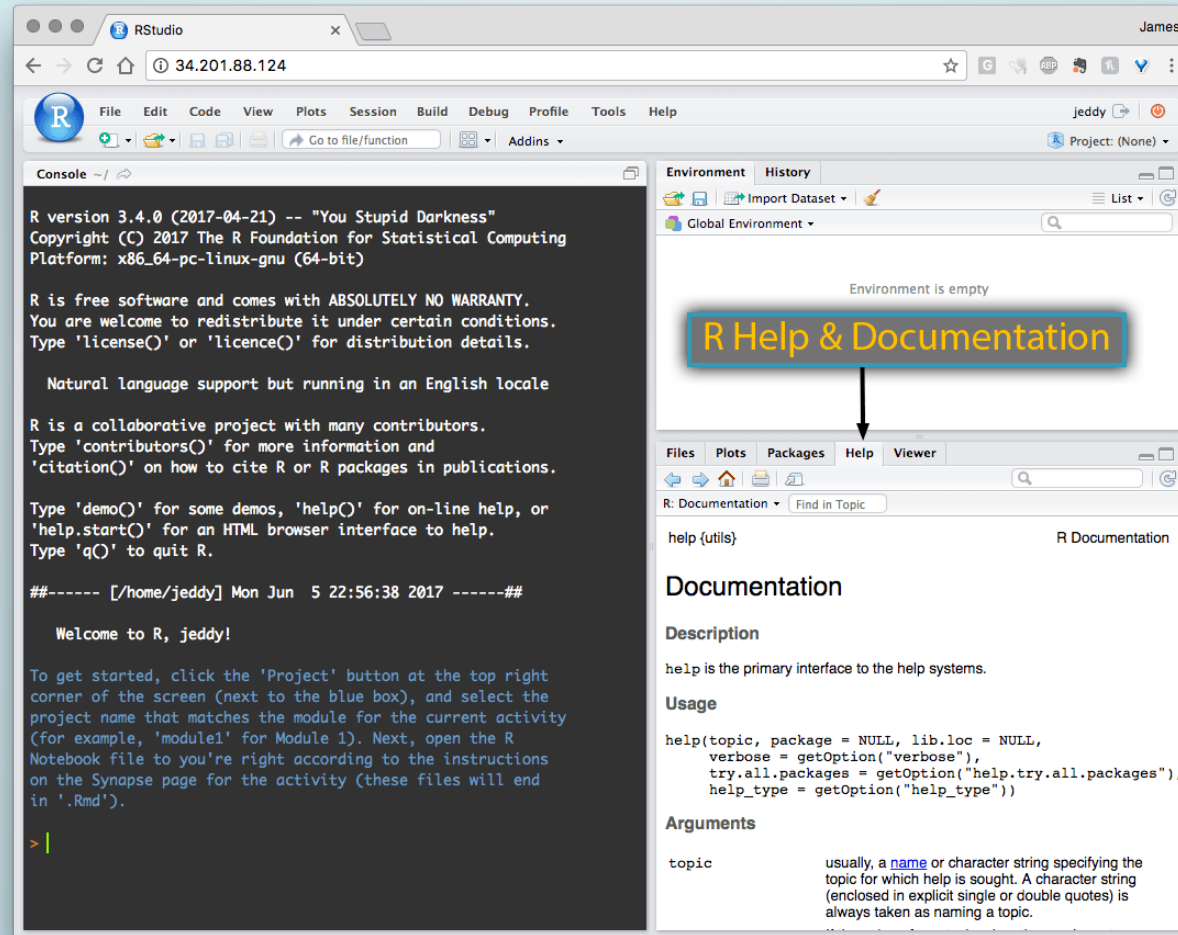
RStudio – Layout

When you start RStudio, you will get a view similar to what is shown below with perhaps slight differences.



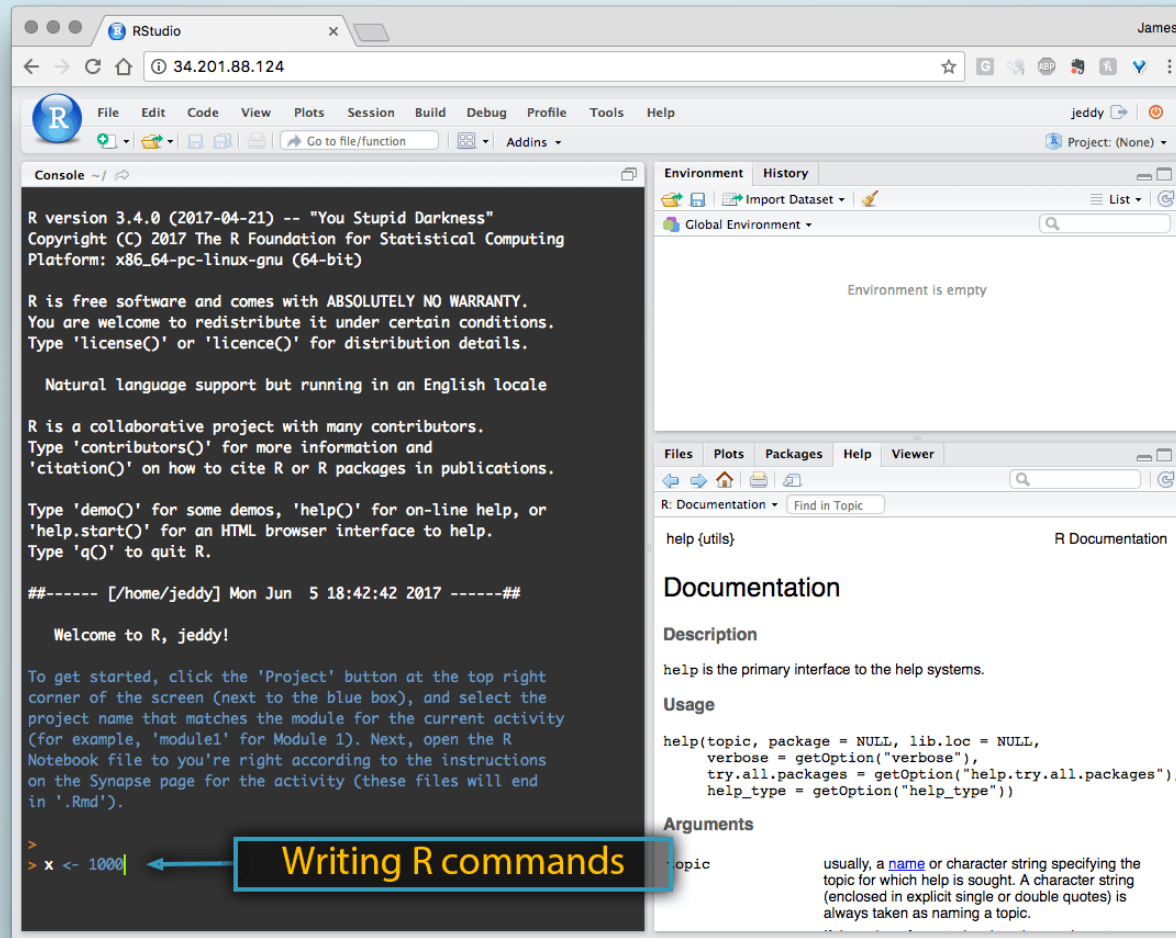
RStudio – Help

A lot of information is available in RStudio in the (searchable) help tab — feel free to investigate.



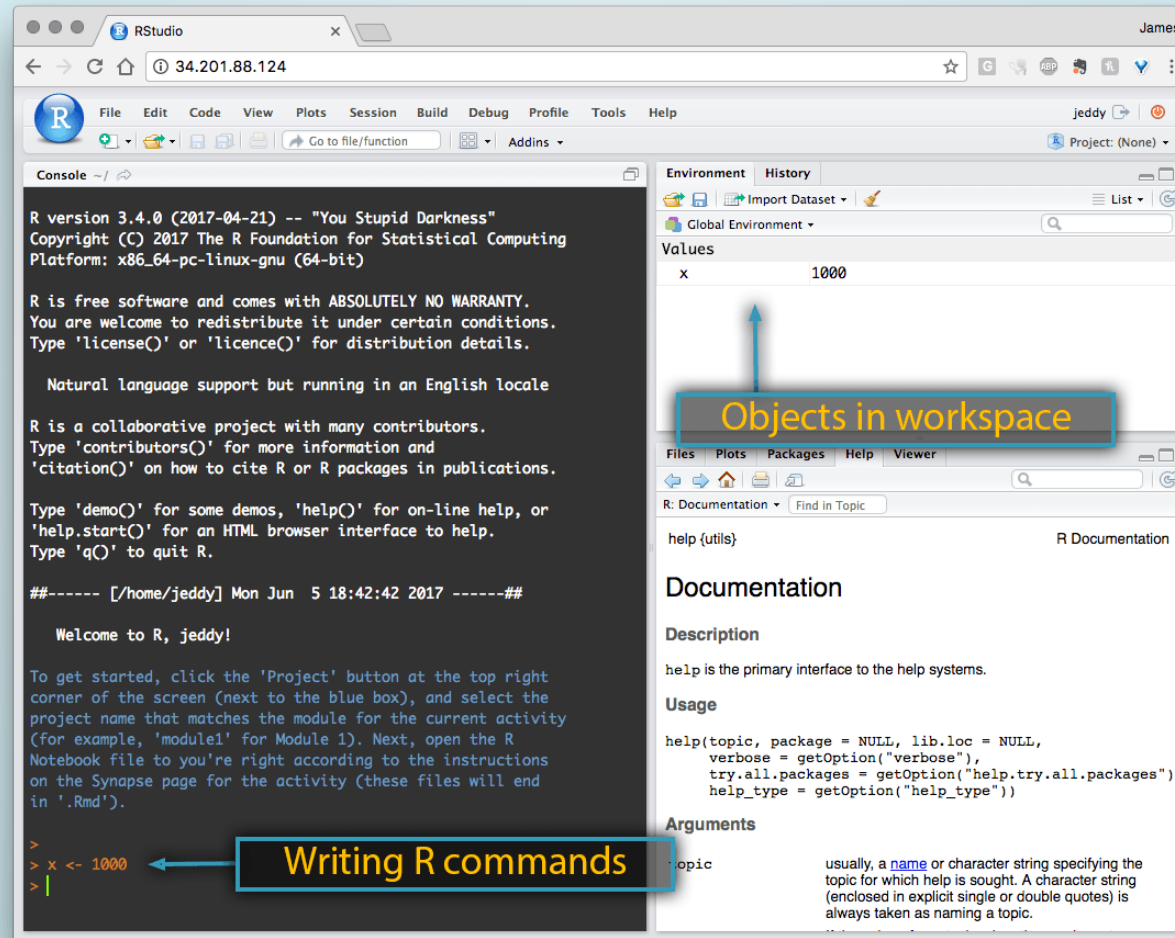
RStudio – Commands

You can type commands directly into the console.



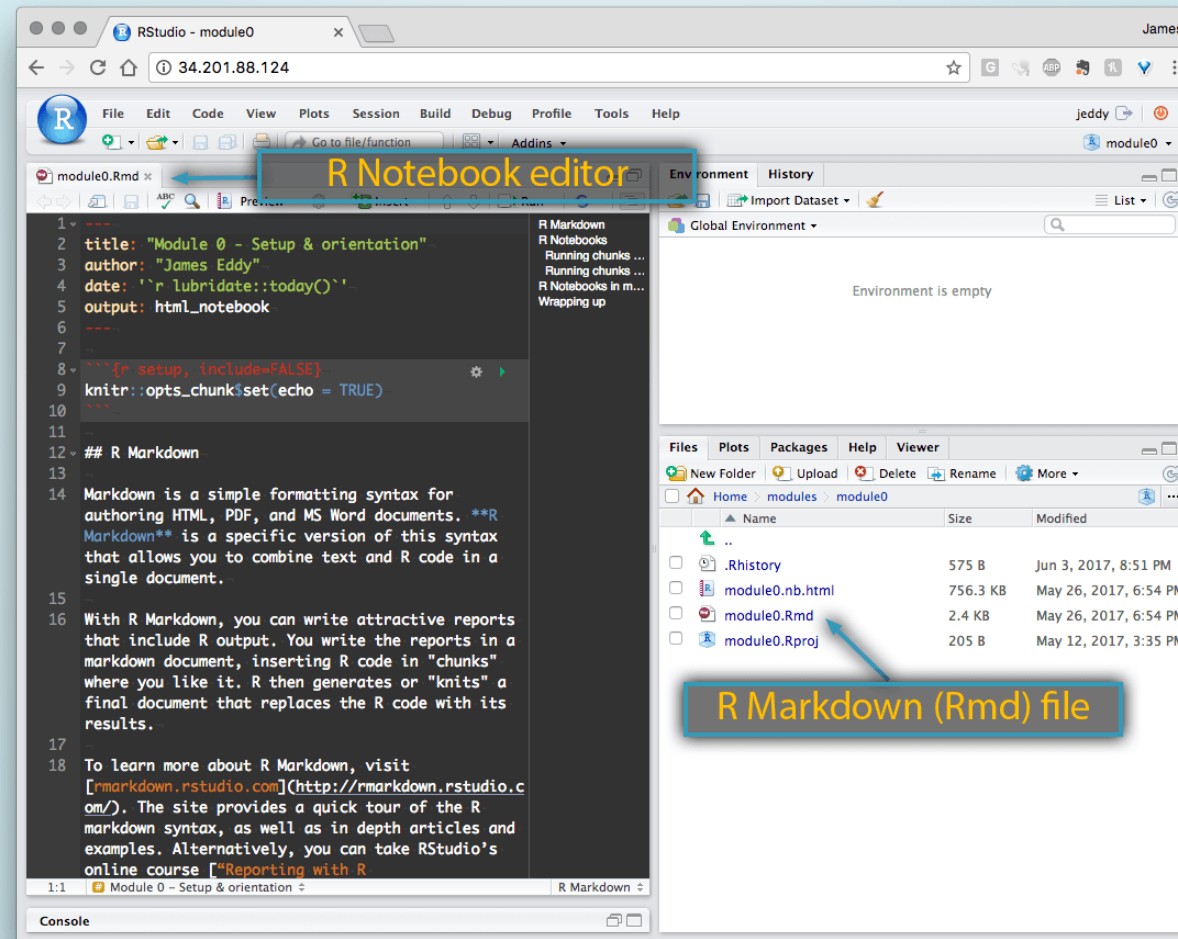
RStudio – Workspace

Outputs will be saved in the current workspace.



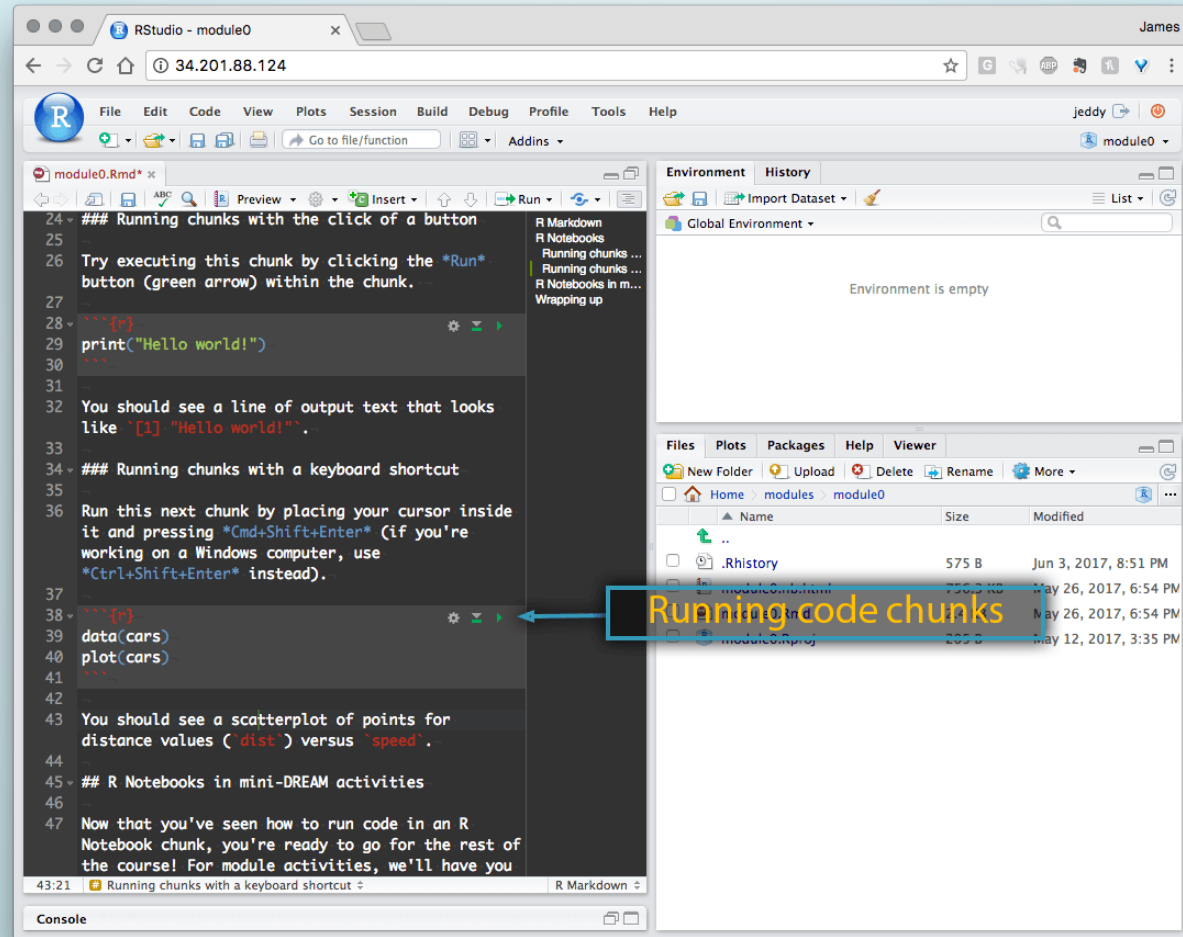
RStudio – R Notebooks

mini-DREAM activities are based in **R Notebooks**, which have `.Rmd`
... more on this in **Activity 0**.



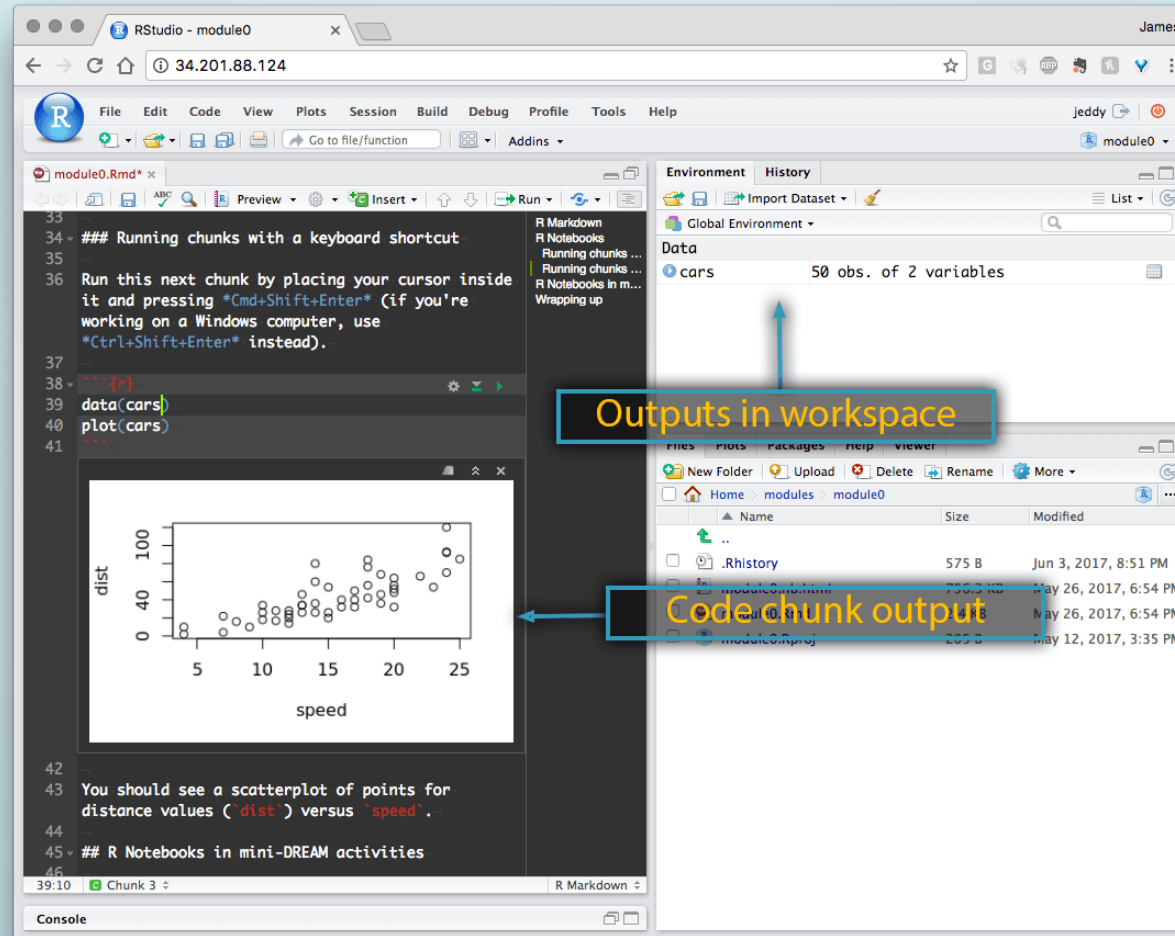
RStudio – R Notebooks

For each activity, you'll read along and run sections of code in "chunks".



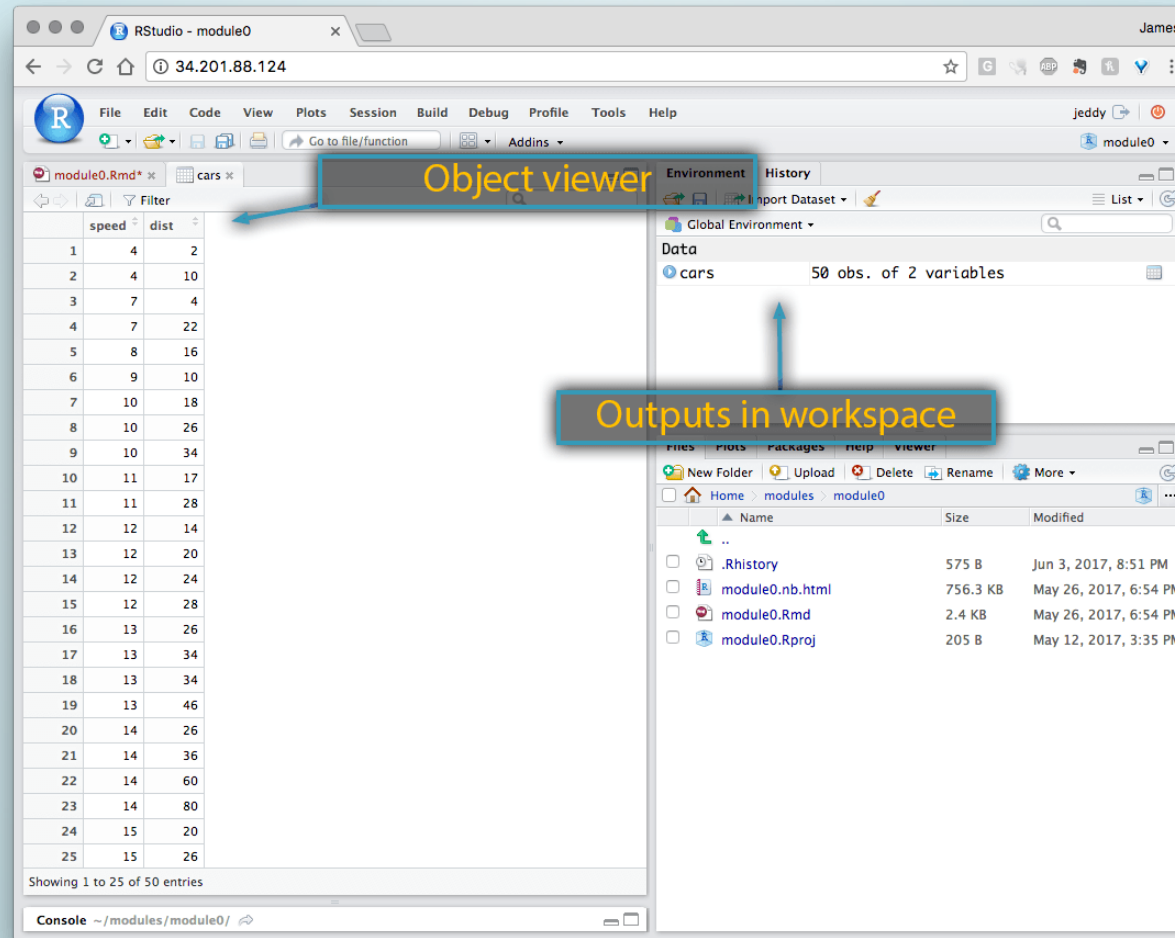
RStudio – R Notebooks

Output from each chunk will be displayed directly below the code, and saved in the workspace.



RStudio – R Notebooks

You can inspect the contents of outputs by clicking on object names.



What next?

Module 0 Activity

- Navigate to **Challenge Modules — Module 0** on the mini-DREAM Synapse site for more info:

<https://www.synapse.org/#!/Synapse:syn12105406/wiki/527879>

- Next week (Tues. 6/12 and Thurs. 6/14) — **Module 1** with Andrew Gentles:

// Programming and modeling for life sciences