These materials adapted by Amelia McNamara from the RStudio CC BY-SA materials Introduction to R (2014) and Master the Tidyverse (2017).

Introduction to R & RStudio:

deck 11: Going Forward

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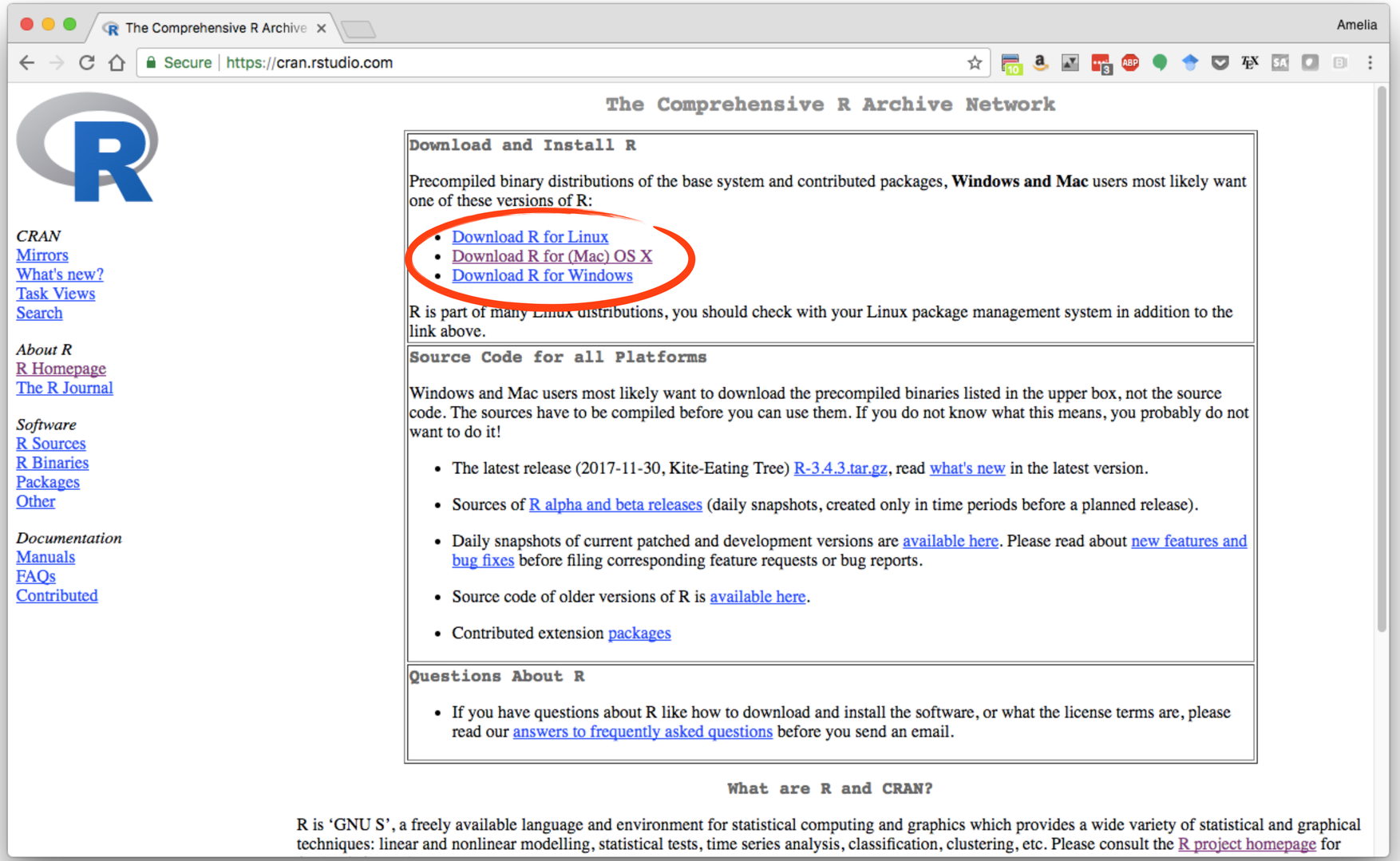
Installing locally

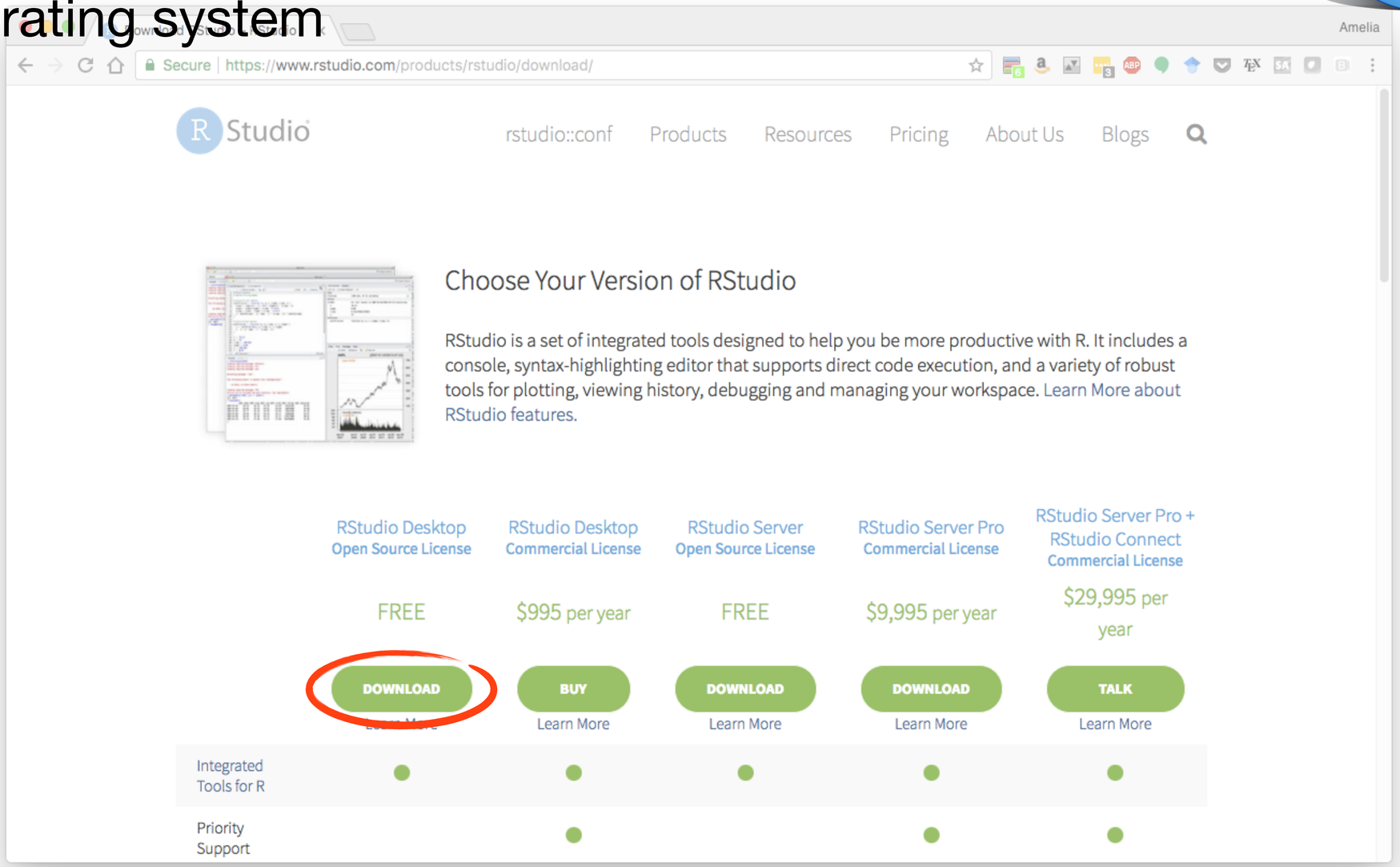
First, you will need to install R (the programming language).

1. Go to https://cran.rstudio.com/
2. Select your operating system



Then, install RStudio (the application).

1. Go to https://www.rstudio.com/products/rstudio/download/
2. Select RStudio desktop
3. Select your operating system



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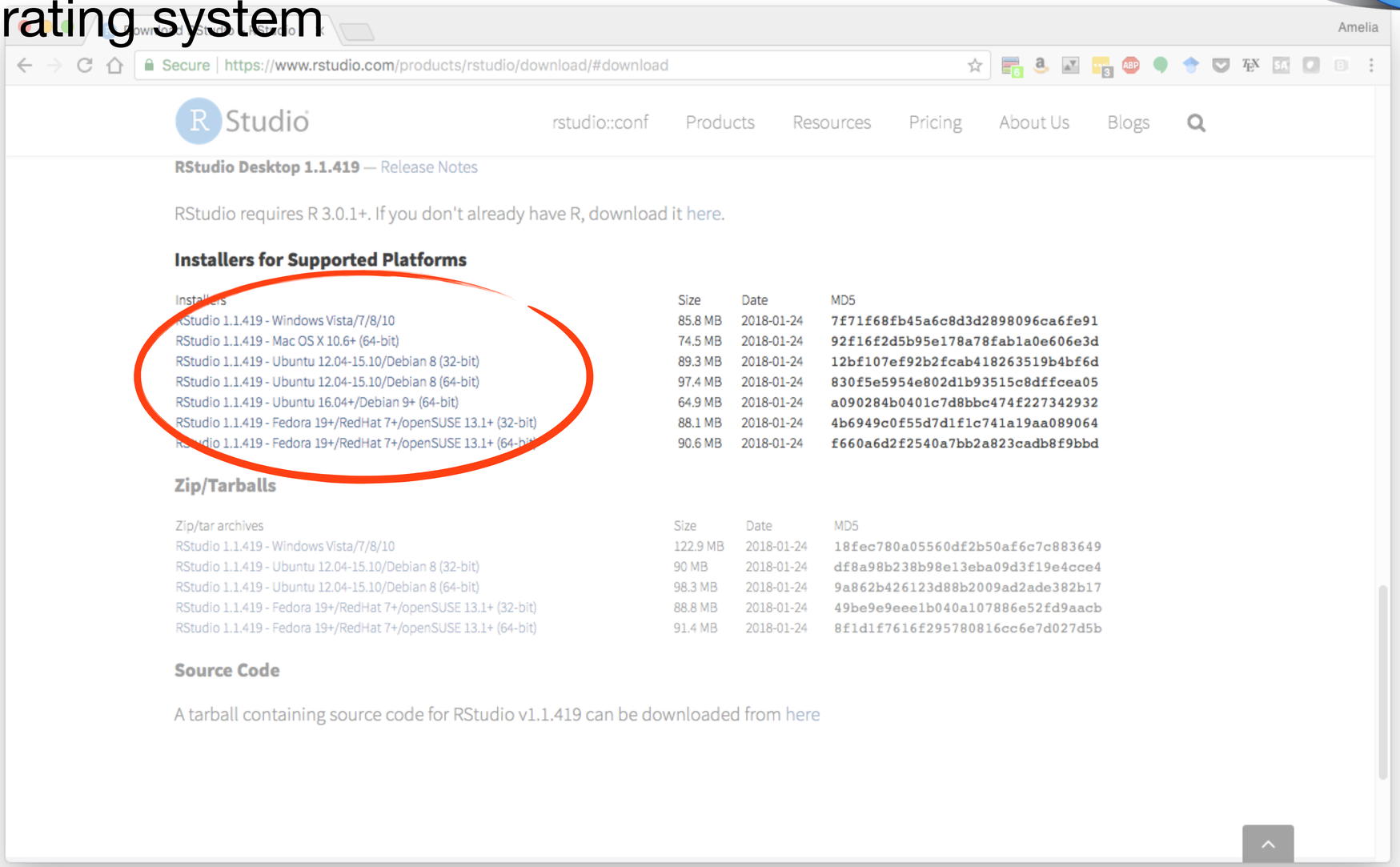


Installing packages

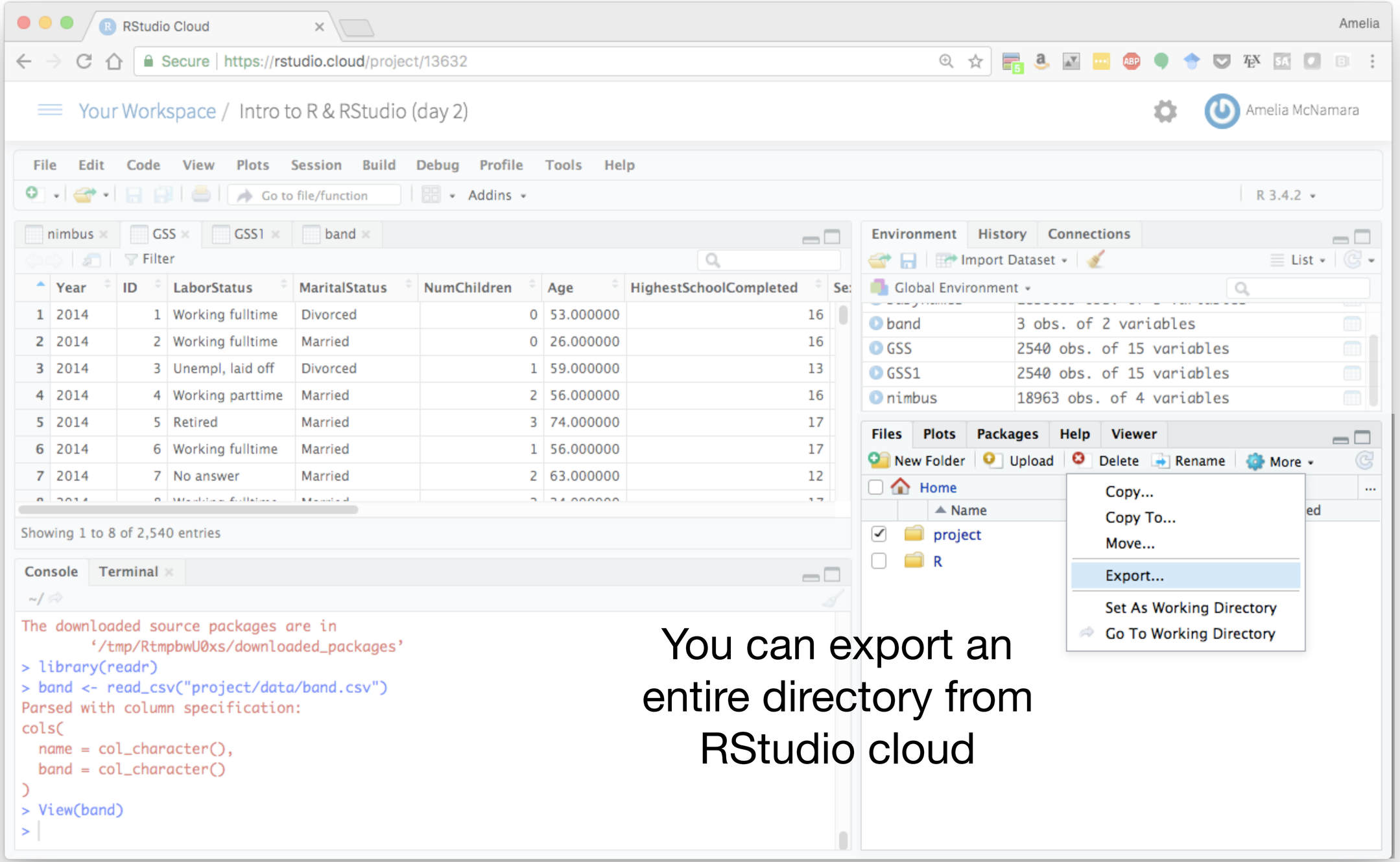
Shortcut to install

- ggplot2, for data visualisation.
- dplyr, for data manipulation.
- tidyr, for data tidying.
- readr, for data import.
- purrr, for functional programming.
- tibble, for tibbles, a modern re-imagining of data frames.

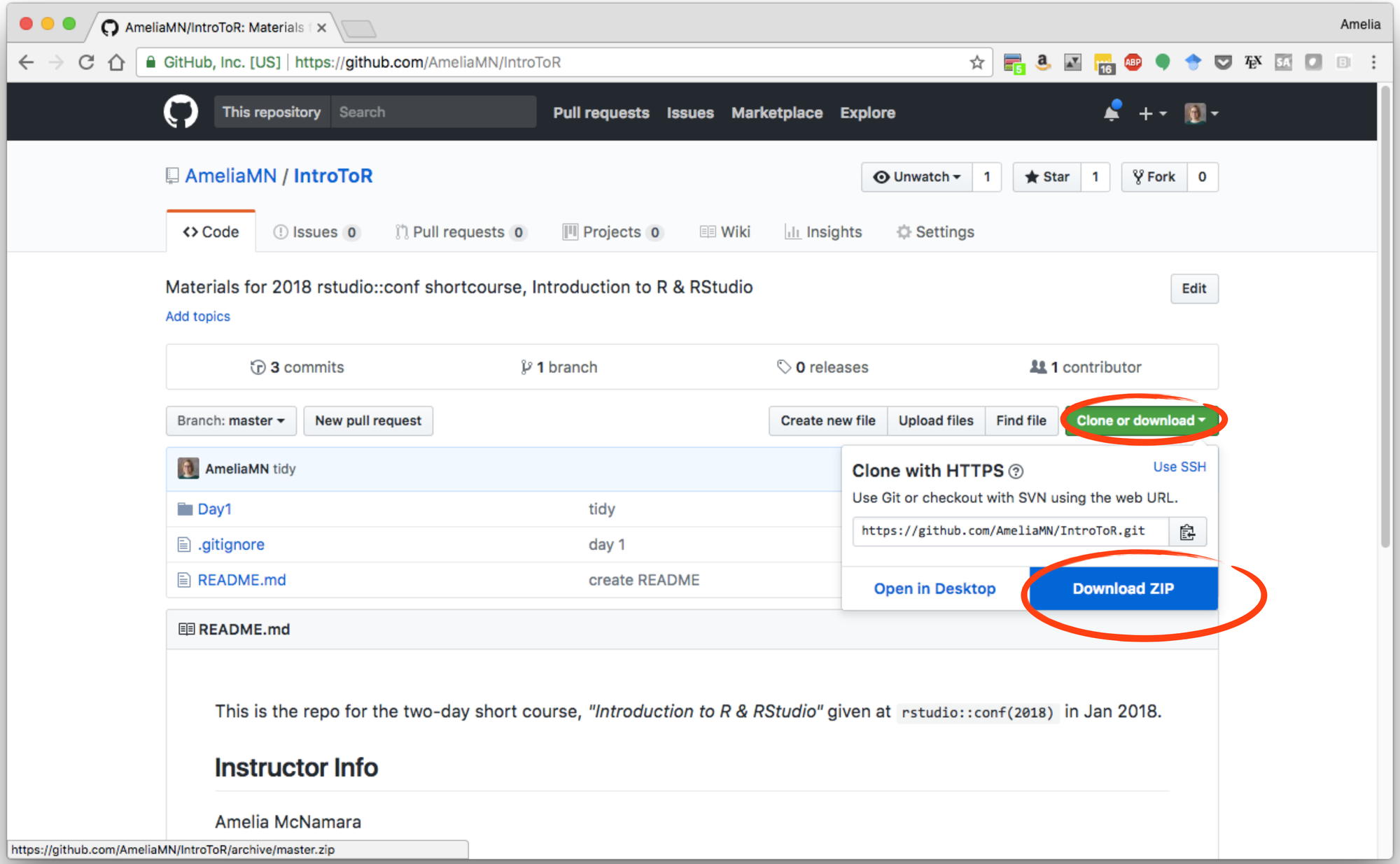
And more

```
install.packages(c("tidyverse", "fivethirtyeight",
"babynames", "nycflights13", "skimr"))
```

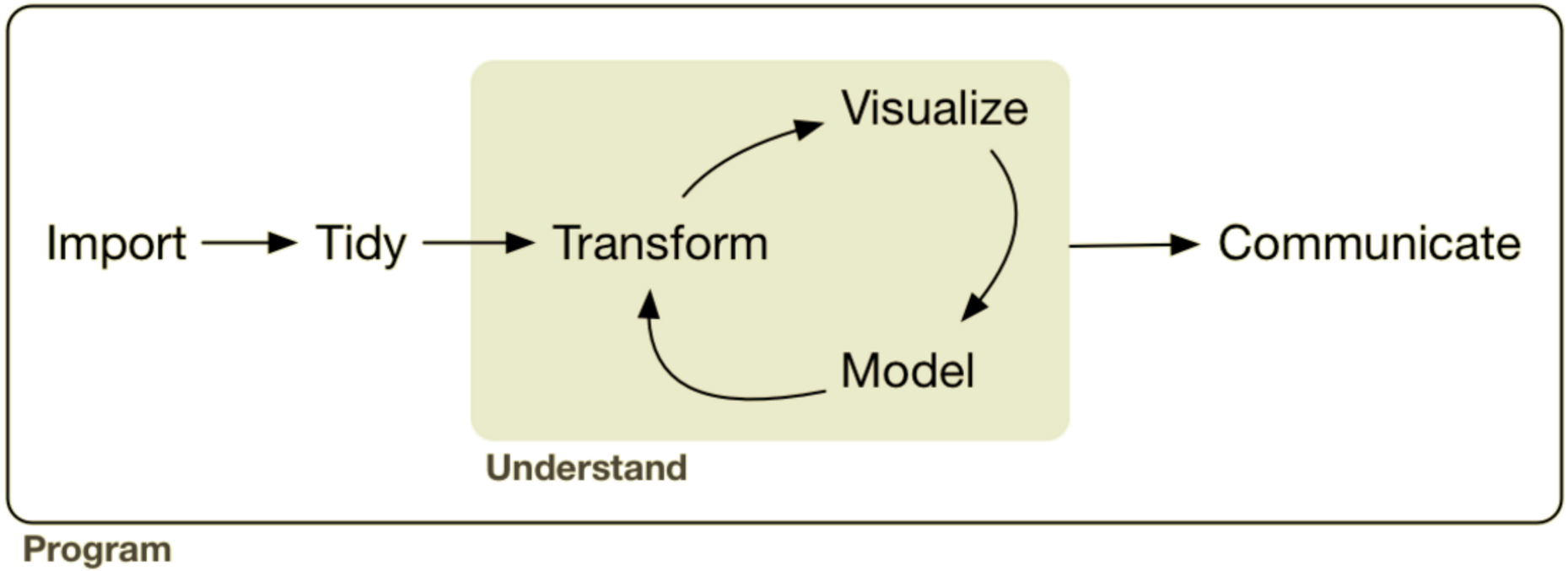
Getting our code


RStudio Cloud
Amelia
Secure | https://rstudio.cloud/project/13632
Your Workspace / Intro to R & RStudio (day 2)
Amelia McNamara
File Edit Code View Plots Session Build Debug Profile Tools Help
Go to file/function
Addins
R 3.4.2
nimbus
GSS
GSS1
band
Filter
Year ID LaborStatus MaritalStatus NumChildren Age HighestSchoolCompleted
1 2014 1 Working fulltime Divorced 0 53.000000 16
2 2014 2 Working fulltime Married 0 26.000000 16
3 2014 3 Unempl, laid off Divorced 1 59.000000 13
4 2014 4 Working parttime Married 2 56.000000 16
5 2014 5 Retired Married 3 74.000000 17
6 2014 6 Working fulltime Married 1 56.000000 17
7 2014 7 No answer Married 2 63.000000 12
Showing 1 to 8 of 2,540 entries
Console Terminal
~/
The downloaded source packages are in
'/tmp/RtmpbwU0xs/downloaded_packages'
> library(readr)
> band <- read_csv("project/data/band.csv")
Parsed with column specification:
cols(
name = col_character(),
band = col_character()
)
> View(band)
>
Environment History Connections
Import Dataset
List
Global Environment
band 3 obs. of 2 variables
GSS 2540 obs. of 15 variables
GSS1 2540 obs. of 15 variables
nimbus 18963 obs. of 4 variables
Files Plots Packages Help Viewer
New Folder Upload Delete Rename More
Home
Name
project
R
Copy...
Copy To...
Move...
Export...
Set As Working Directory
Go To Working Directory
You can export an entire directory from RStudio cloud

Or, download another clean version from https://github.com/AmeliaMN/IntroToR



More packages



From *R for Data Science* by Hadley Wickham and Garrett Grolemund.

You are probably going to want to explore many more packages than we discussed. In particular:

- If you have categorical data, especially if you want it to appear in an ordered way, you should explore `forcats`

- If you need to work with character strings, and pull pieces of text out, see `stringr`

- For easier-to-work with date/time data, use `lubridate`

Getting help

- We've seen the R help functions `?` and `help()`
- Google, putting in R as a search term (Google recognizes it now!)
- Search on http://stackoverflow.com/ (add keywords like tidyverse)
- Ask a question of someone near you physically (there are R meetups in many major cities, as well as R-ladies meetups).
- Ask a question on the internet
  - https://community.rstudio.com/ is intentionally friendly to beginners!
  - Asking on http://stackoverflow.com/ is perhaps an intermediate skill
  - I don't recommend asking on R-help
- Ask an expert— you can email me at amcnamara@smith.edu

!!

Thanks to my fantastic TAs

Katie Leap

Kelly O'Briant

@b23kelly @RLadiesDC

Thank you!

http://bit.ly/day2Feedback