

R Setup and Practice

Stat 135 Lab 1

GSI: Yutong Wang

Email: ytwang *at* berkeley *dot* edu

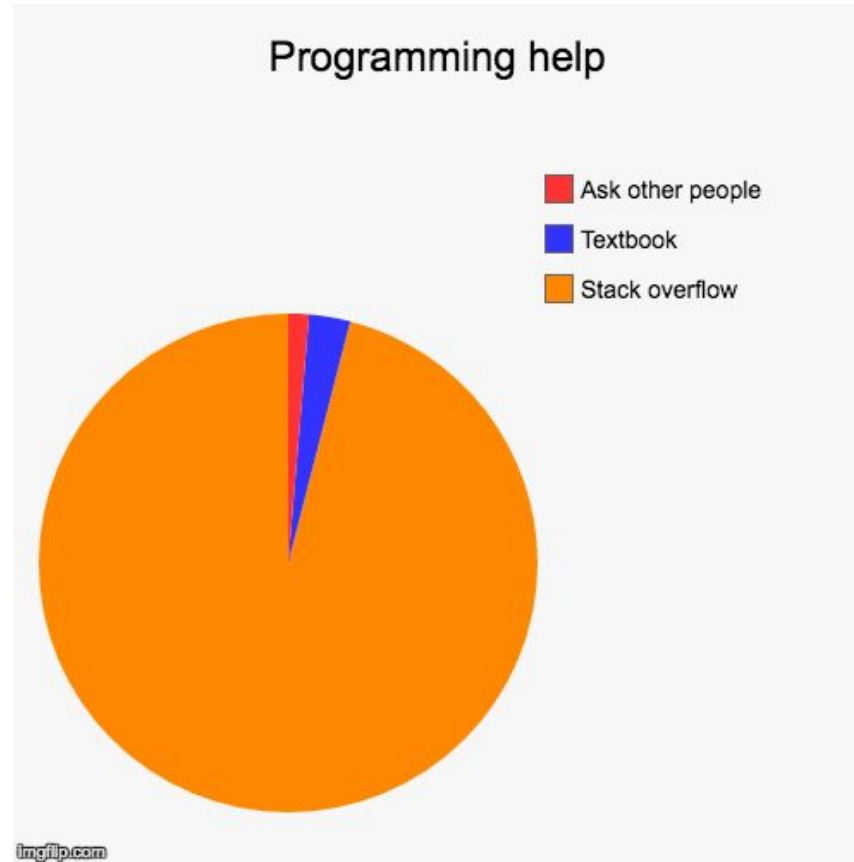
Office Hour: Wed 12-1 @ SLC

Thu 1-3, Fri 9-10 @ 444 Evans

Why R?

1. Powerful language for data analysis
2. Huge developer community
3. Growing user community
- ...

Learning Sources for R



Source: <https://www.reddit.com/r/ProgrammerHumor>

Learning Sources for R

1. The Art of Googling

Check ***Stack Overflow*** whenever you have error/bugs/questions

2. Stat 133: Concepts in Computing with Data

<https://classes.berkeley.edu/content/2020-spring-stat-133-001-lec-001>

3. 'R Programming' class on *Coursera*

<https://www.coursera.org/learn/r-programming>

4. *Youtube* is always your friend!

Installation

1. Install R
2. Install RStudio
3. Install DataComputing

Guideline:

bCourses(stat135) ---> Pages --->
installing R/Rstudio/DataComputing

RStudio

The screenshot displays the RStudio interface with the following components:

- Script Editor:** Contains R code for a document titled "lab1.Rmd". The code includes a title, output type, runtime, chunk setup, library loading (learnr, ggplot2, dplyr, DataComputing, mosaicData), and a chunk for "data types in R".
- Console:** Shows the current working directory as `~/Documents/grad/spring20/GSI135/Lab/Lab1/` and provides instructions for using R help and quitting.
- Environment Pane:** Lists variables in the Global Environment, including `cormat`, `Gamma`, `learning`, `melted.cormat`, `mu`, and `prostate`.
- Files Pane:** Displays the System Library with a table of installed and available packages.

Name	Description	Versi...
<input type="checkbox"/> abind	Combine Multidimensional Arrays	1.4-5
<input type="checkbox"/> acepack	ACE and AVAS for Selecting Multiple Regression Transformations	1.4.1
<input type="checkbox"/> ada	The R Package Ada for Stochastic Boosting	2.0-5
<input type="checkbox"/> adabag	Applies Multiclass AdaBoost.M1, SAMME and Bagging	4.2
<input type="checkbox"/> ajive	Angle Based Joint and Individual Variation Explained	0.1.0
<input type="checkbox"/> annotate	Annotation for microarrays	1.64.0
<input type="checkbox"/> Annotatio...	Manipulation of SQLite-based annotations in Bioconductor	1.48.0
<input type="checkbox"/> ape	Analyses of Phylogenetics and Evolution	5.3
<input type="checkbox"/> arm	Data Analysis Using Regression and Multilevel/Hierarchical	1.10-1

Lab Time



Source: Facebook group - R Memes For Statistical Fiends

Lab Time

- *How to copy and paste a line of code to console quickly?*
- Windows: Ctrl+Enter
MacOS: Command+Enter

- *How to comment (out) certain lines of code?*
- Windows: Ctrl+Shift+C
MacOS: Command+Shift+C

- *What does some function (e.g. lapply) do?*
- Insert **?lapply** in console (? + func name)
Or search **lapply** in Help