Week 2: Accessing and Viewing Data

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Welcome to Week 2!

Make sure you have the session 2 practice materials downloaded from the webpage: https://ucb-psychology-quack.github.io/site/Bootcamp_2023/bootcamp2023

Week 2 Warm-Up

1. Please sign in with the link or QR code: https://tinyurl.com/bootcamp-signin
2. Make a New R script.
    i. Save it to your computer. Title it “S2_warmup”
    ii. Add a comment with the date, a title, and your name
3. Create three different vectors:
    i. A vector called "names" with three names
    ii. A vector named "ages" with three ages of college students
    iii. A vector called "year" with three years of college (e.g., Freshman, Sophomore, etc.)
4. Run the code and check that everything looks correct in the global environment.

Today's agenda (Topic: Accessing & Viewing Data)

- Data frames
- Working directory
- Reading in data
- Viewing your data
- Making factors
- Group activity to practice!

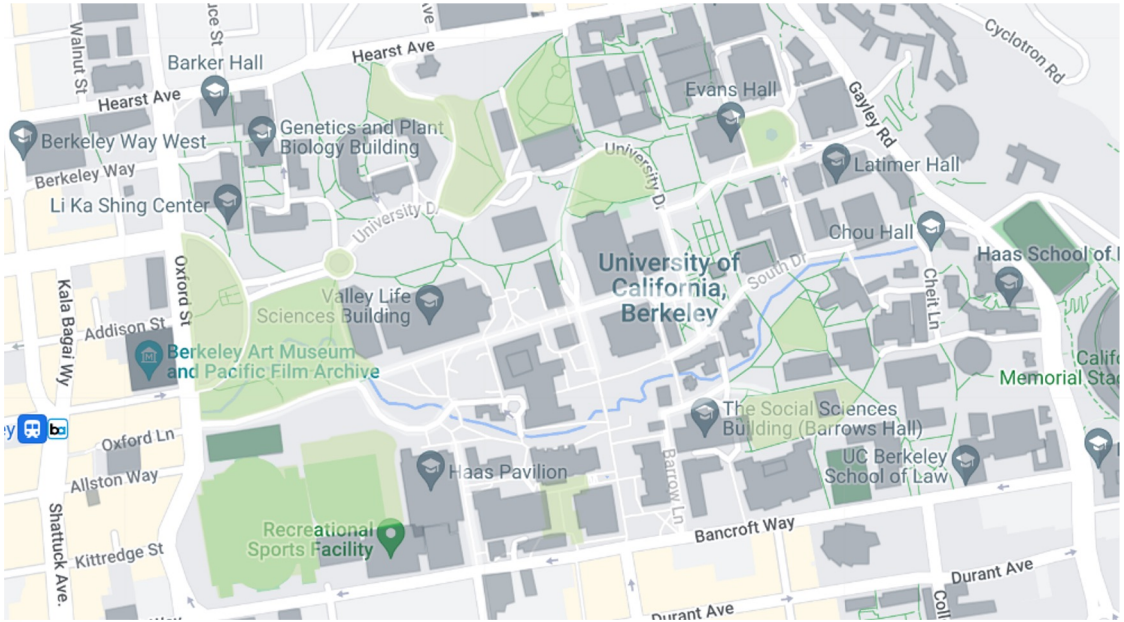
What is a “working directory”?

- The current file path that R is using and where it will “look” for files
  - R will assume I want to read in or write out files using this folder
- You can think of file paths as addresses
- Our files are in a **nested structure**

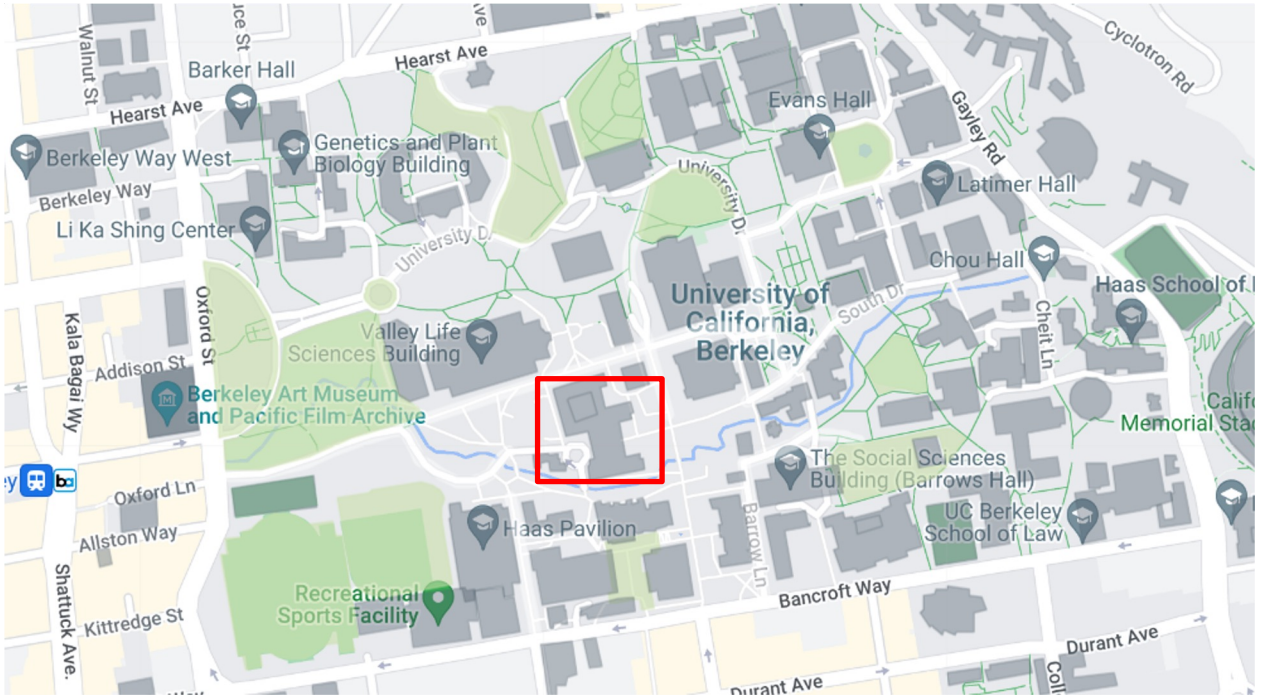
For more info see YaRR: A Pirate’s Guide to R chapter

For instance….

- Let’s say you have a class! But where are you going? Where is it being held?

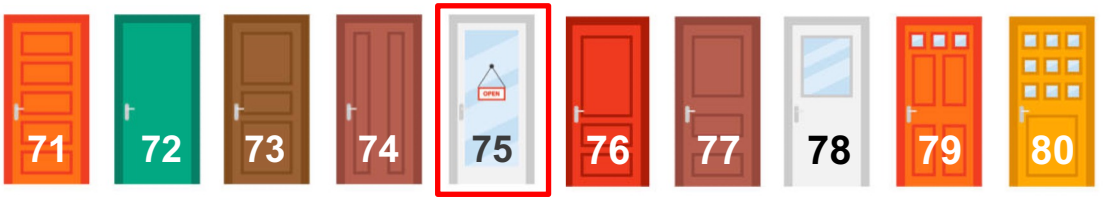


It’s in Dwinelle Hall



It’s in the basement!

In room 75!



These have a **NESTED STRUCTURE**

UC Berkeley

Campus

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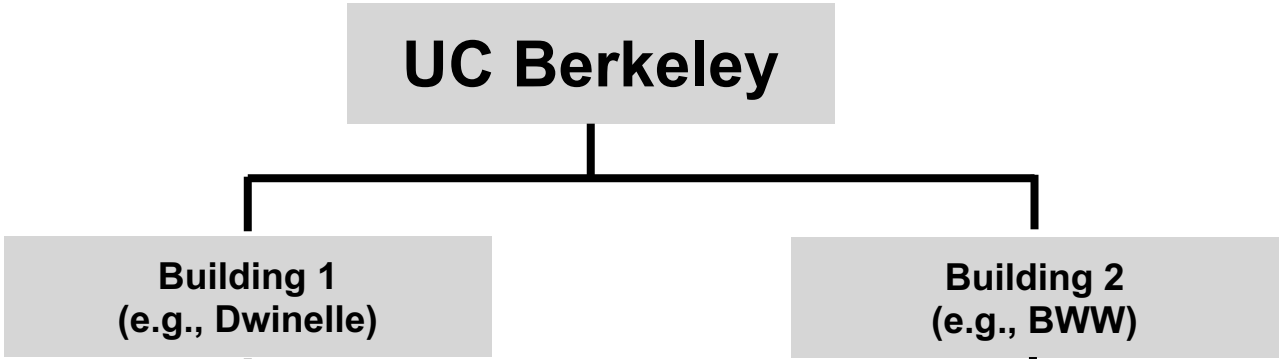

Campus

Building

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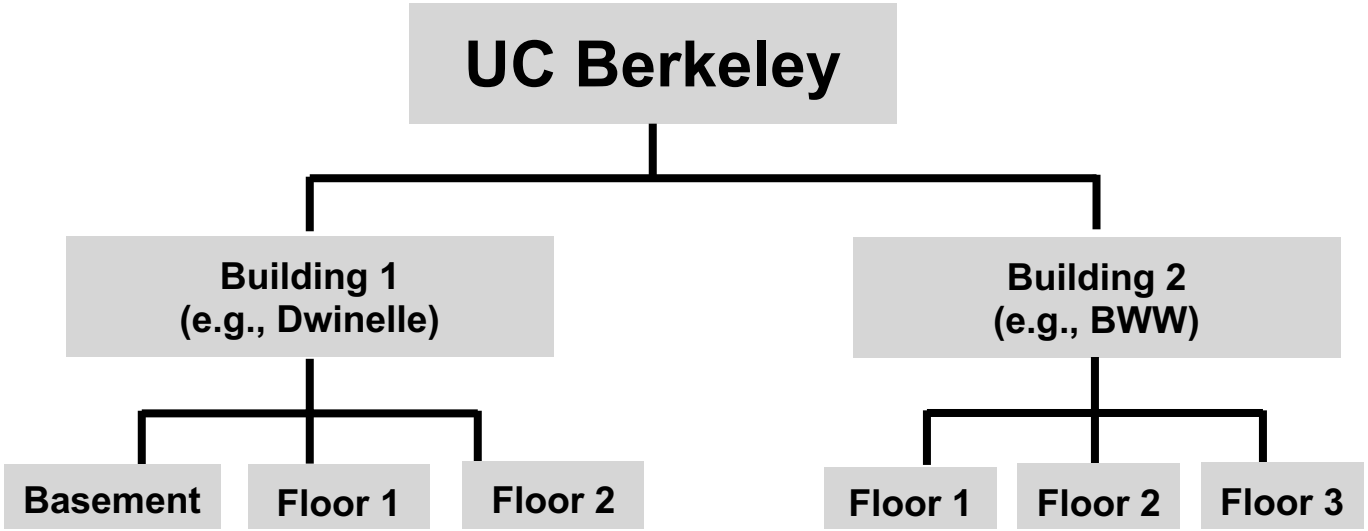

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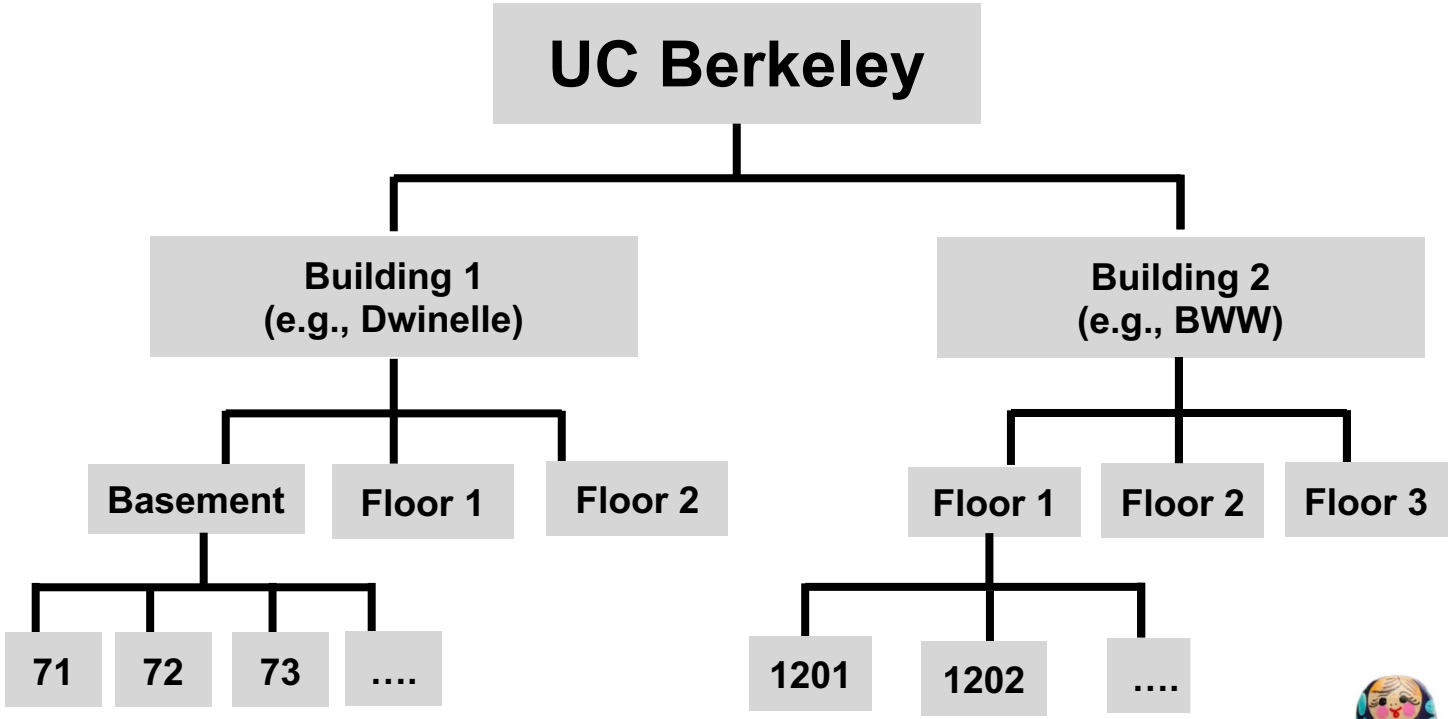


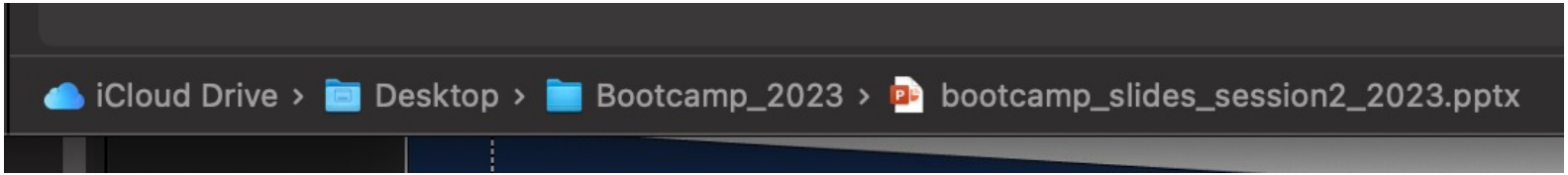
Campus

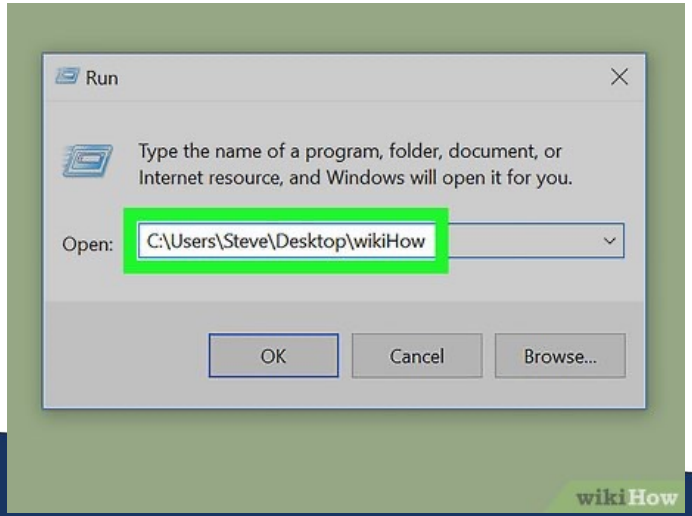
Building

Floor

Similar to *file path*

- Your computer already stores files in this same way!





Working directory and loading data

- Organization is up to you (and ask your grad student for how they do it!)
- Whatever you do though, you need to understand it when you're loading your data!
- R has to know where to look for the data file, or it won't be able to read it in

Most common errors when loading data

- Wrong file path (i.e., wrong working directory so R is looking in the wrong place and cannot find the file)
- Forgot to put quotes around the name of the file and/or file path! read.csv(“penguins.csv”)

Other tips:

- Don’t use spaces in your file names or folder names!