DATA 301 Notes September 23rd, 2020

* Software and logistics
* Lab questions—ask TA
* All info on Canvas on course content page

Announcements

* Lab 1 will be due Oct 2nd, 2020 at 6pm
* Office hours –4:30-5:30pm

The Command Line

* Software Carpentry—useful website for learning Command Line
  + Tells you everything about it
  + Sections 1-3 (working w/ files and directories, shell, and navigating directories
* Command line – useful for starting programs, navigating directories and manipulating files, searching, sorting and editing text files
* Why learn it?—allows you to interact w/ computer in ways that go beyond GUI
* Commonly used for scripting and automation of tasks
* Faster than GUI
* Only way of connecting via SSH
* Accessible as command prompt
  + Use GitBash instead as some commands are not cross-platform
* Press enter to execute a command

Commands

* + “ls” –list all directories on your system
  + “clear” – clears all info on terminal
  + “mkdir”—make a new directory
    - E.g. “mkdir data 301” – make “data 301” directory
  + “cd” – go to a folder
  + “..”—go up one directory
  + “git clone (ctrl+v)” – should open a git hub link
    - Clones it to your PC
  + File system—has a tree
    - C:/
    - Contains many folders, which contain files
    - Absolute vs relative path
      * Relative to home directory
      * “~” takes you back
    - Navigate relative paths—cd. = current directory; cd.. – one directory above it
    - Go through lecture again and try activities for practice
    - Make folder within a folder – mkdir 301/level1—add original folder name and /
    - “File relative and absolute paths” youtube video
    - For practice—use terminal for everything
    - “open” will open a file in the default application
* Jupyter notebook and lab
  + From next week, we’ll be attempting python
  + Once in interface, click new, and click python 3
    - Print(“Hello\_world”)