

**Bash and GitHub**  
**Due Date: Thursday 9/19 @ 11:59 PM**

Note on Absolute vs Relative File Paths

Absolute File Paths: The entire path of a file or folder starting with “/” or “/mnt/c/”

- Mac example: /Users/wadeb/Documents/QBIO490/course\_description.pdf
- PC Example: /mnt/c/Users/wadeb/Documents/QBIO490/course\_calendar.pdf

Relative File Paths: A shortened file path that takes your current location into consideration.

- . represents your current directory, .. represents the previous directory (one above)
- In /Documents folder...

./QBIO490/ = ../Documents/QBIO490/ = /mnt/c/Users/wadeb/Documents/QBIO490/

**Answer the following questions about Bash:**

- Type out definitions for the following commands and shortcuts in your own words. Refer to the slides for definitions of commands, and use google to look up the definitions of any unknown shortcuts.
  - a. pwd: print out the directory you are working in
  - b. mkdir: make directory
  - c. cd <dir>: change the current directory to another one
  - d. cd ..: move up by one directory
  - e. ls: list the contents of the current directory
  - f. rm and the -r flag: deletes (recursively if with -r) file or directory
  - g. cat: displays the content of a file or combined files
  - h. head: displays the first 10 lines of a file
  - i. tail: displays the last 10 lines of a file
  - j. scp: copies one directory or file to another location
  - k. nano (including Ctrl+o and Ctrl+x): text editor, saves the file, exits the editor
  - l. --help: displays help information for a command
  - m. TAB: completes file names and command in the terminal automatically
  - n. Ctrl+a: moves the cursor to the beginning of the current line
  - o. Ctrl+e: moves the cursor to the end of the current line
  - p. Ctrl+r: searches through previously entered commands
  - q. Ctrl+k: cuts everything from the cursor to the end of the line
  - r. Ctrl+u: cuts everything from the cursor to the beginning of the line
  - s. Ctrl+l: clears the terminal screen
- What command would you use to navigate to your Desktop from /Users/ using an absolute path? Relative path?  
Absolute path: cd /Users/name/Desktop    Relative path: cd Desktop
- How would you copy /Desktop/Example Folder/ with multiple documents inside to /Documents/?  
cp -r /Users/name/Desktop/Example Folder/ /Users/name/Documents/

- If you didn't know which folder you were in, how would you navigate back to /Documents/?

pwd      cd /Users/name/Documents

**Fill in the blank:**

- To push your local changes to GitHub, use the following sequence of commands:
  1. `git status` to view any unsaved changes.
  2. `git add` to save all files, or to save a specific file/folder.
  3. `git commit` to commit files for saving. Use '-m' to include a message.
  4. `git push` to push your changes to GitHub.

**Do it yourself!**

- ☐ Use commands in Bash to add the completed homework file to your week3\_bash\_github folder in your local qbio\_490\_name repository
- ☐ Use GitHub to stage, commit, and upload your completed Bash and Github HW into your personal GitHub repo.

**Turn in your answers for this assignment by attaching a link to your personal GitHub repo on Brightspace for full credit**