**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.
  1. pwd show the directory that I am currently in
  2. mkdir make a directory
  3. cd <dir> go into or change a directory
  4. cd .. go into a directory that is above the current one
  5. ls list the contents in the current directory
  6. rm and the -r flag remove/deletes all the files contained in this directory(-r for recursive)
  7. cat concatenate two files or to show the contents of file
  8. head display first 10 line of a file
  9. tail display the last 10 lines of a file
  10. scp copy one directory from a location to another location
  11. nano (including Ctrl+o and Ctrl+x) command-line text editor(Ctrl+0 saves edited file, and Ctrl+x exits the edited file)
  12. –help gives information on built-in command(for example <ls –help>)
  13. TAB press tab after typing a command such as “ls” will give multiple possible completions
  14. Ctrl+a moves the cursor to the beginning of the line
  15. Ctrl+e moves the cursor to the end of the line
  16. Ctrl+r reverse search mode-search through your command history
  17. Ctrl+k deletes all the characters from the cursor to the end of the line
  18. Ctrl+u Deletes the text from the beginning of the line to the cursor position(deletes the line before the cursor)
  19. Ctrl+l clear the terminal
* What command would you use to navigate to your Desktop from /Users/ using an absolute path? Relative path?

Absolute path: cd /Users/yuhanyuan/Desktop

Relative path: cd ./yuhanyuan/Desktop cd yuhanyuan/Desktop

* How would you copy /Desktop/Example Folder/ with multiple documents inside to /Documents/?

cp -r /Desktop/Example Folder/ /Documents

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

cd /Users/yuhanyuan/Documents

**Fill in the blank:**

* To push your local changes to GitHub, use the following sequence of commands:

git status

1.to view any unsaved changes.

git add

2.to save all files, or to save a specific file/folder.

git commit

3.to commit files for saving. Use ‘-m’ to include a message.

git push

4.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**