

Kate Olsen

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 working directory**, gives you the absolute file path
 - b. mkdir **make directory**, creates a directory / folder
 - c. cd <dir> **change directory**, how you navigate to a specific folder
 - d. cd .. **goes back to the previous directory**
 - e. ls **lists the contents of the current directory**
 - f. rm and the -r flag **recursive remove**, allows you to delete a directory and its contents
 - g. cat **concatenate**, displays contents of a file; can also be used to concatenate files
 - h. head **default prints first 10 lines of file but can be adjusted**
 - i. tail **default prints last 10 lines, also can be adjusted**
 - j. scp **secure copy**, allows you to copy a file or files to another directory
 - k. nano (including Ctrl+o and Ctrl+x) **text editor, VIM alternative**
 - Ctrl+o allows you to write to a file
 - Ctrl+x is to exit nano and return to the regular command line
 - l. --help **syntax: <command> --help**; gives you examples and uses of a given command
 - m. TAB **auto completes the line**
 - n. Ctrl+a **moves to the beginning of the line**
 - o. Ctrl+e **moves to the end of the line**
 - p. Ctrl+r **searches command history in reverse order**
 - q. Ctrl+k **clears text from current position to end of line**
 - r. Ctrl+u **deletes the current line**
 - s. Ctrl+l **clears terminal screen, alternatively you can just type clear**

- What command would you use to navigate to your Desktop from /Users/ using an absolute path? Relative path?
 Absolute path: `cd /Users/olsen/Desktop`
 Relative path: `cd olsen/Desktop`
- How would you copy /Desktop/Example Folder/ with multiple documents inside to /Documents/?
`scp -r /Desktop/Example\ Folder/ /Documents/`
- If you didn't know which folder you were in, how would you navigate back to /Documents/?
 Since /Documents/ is the absolute path, you can just `cd /Documents/`.

Fill in the blank:

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

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