

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`- prints wherever you are in the directory thing, with the path
 - b. `Mkdir`- makes a directory
 - c. `cd <dir>`- go into whatever directory you put in `<dir>`
 - d. `cd ..` – go into whatever file or directory you put in
 - e. `ls`- prints out a list of everything within the current directory
 - f. `rm` and the `-r` flag- removes files, `-r` flag is for directories
 - g. `cat`- reads and then displays the file
 - h. `head`- displays the first ten lines of the file
 - i. `tail`- displays the last ten lines of the file
 - j. `scp`- copies a file to another place
 - k. `nano` (including `Ctrl+o` and `Ctrl+x`)- used to edit text easily, such as lines of code
 - l. `-help`- provides a list of commands
 - m. `TAB`- completes your input if it is incomplete
 - n. `Ctrl+a`- goes to the beginning of the command line
 - o. `Ctrl+e`- goes to the end of the command line
 - p. `Ctrl+r`- reviews history starting at the current line and moving up
 - q. `Ctrl+k`- clears everything after the cursor
 - r. `Ctrl+u`- clears everything before the cursor
 - s. `Ctrl+l`- clears everything

- What command would you use to navigate to your Desktop from /Users/ using an absolute path? Relative path?

For an absolute path, I would use /mnt/c/Users/prest/OneDrive/Desktop. For a relative path, since I start in prest, I would simply use cd OneDrive/Desktop.

- How would you copy /Desktop/Example Folder/ with multiple documents inside to /Documents/? I would do `scp -r /mnt/c/Users/prest/OneDrive /Desktop/Example Folder /mnt/c/Users/prest/OneDrive /Desktop/Documents`
- If you didn't know which folder you were in, how would you navigate back to /Documents/? I could use `pwd`, and then use a combination of `cd ..` or `ls` and then `cd <folder>` until I am there.

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