

Bash and GitHub

Due Date: Friday 2/3 @ 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 where they tell you which directory you're in currently
 - b. `mkdir` create a new folder
 - c. `cd <dir>` change location to directory within the \diamond
 - d. `cd ..` change location to previous directory or folder
 - e. `ls` list all items in the current directory
 - f. `rm` and the `-r` flag delete file/folder/directory
 - g. `cat` shows file (preview of everything)
 - h. `head` shows first ten lines
 - i. `tail` shows last ten lines
 - j. `scp` copy file from one location to another
 - k. `nano` (including `Ctrl+o` and `Ctrl+x`) enter nano where you can edit file (O: save and exit, X: edit)
 - l. `--help` explains some known commands
 - m. `TAB` auto completes the command you were writing
 - n. `Ctrl+a` beginning of line
 - o. `Ctrl+e` end of line
 - p. `Ctrl+r` shows previous commands that match what you wrote
 - q. `Ctrl+k` delete line after cursor
 - r. `Ctrl+u` delete line before cursor
 - s. `Ctrl+l` clear
- What command would you use to navigate to your Desktop from `/Users/` using an absolute path? Relative path?
absolute path: `cd /Users/mahijamogalipuvvu/Desktop`
relative path: `cd mahijamogalipuvvu/Desktop/`
- How would you copy `/Desktop/Example Folder/` with multiple documents inside to `/Documents/`?

`scp -r ExampleFolder ../Documents/`

- If you didn't know which folder you were in, how would you navigate back to /Documents/? by providing the absolute path to Documents: `cd /Users/mahijamogalipuvvu/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 create a folder *week4_hw* in your local *qbio_490_name* repository
- ☐ Save your literature presentation slides to your computer and then use Bash to move them into *week4_hw*
- ☐ Use GitHub to stage, commit, and upload your new folder and presentation slides into your personal GitHub repo.

Turn in your answers to this document and attach a link to your personal GitHub repo on BlackBoard for full credit