

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 (tells which directory you’re in)**
 - b. `mkdir` – **make directory**
 - c. `cd <dir>` - **change directory**
 - d. `cd ..` – **change to the directory above**
 - e. `ls` – **list contents of current directory**
 - f. `rm` and the `-r` flag – **remove (-r = recursive)**
 - g. `cat` – **concatenate (view file contents)**
 - h. `head` – **view first 10 lines**
 - i. `tail` – **view last 10 lines**
 - j. `scp` – **secure copy**
 - k. `nano` (including `Ctrl+o` and `Ctrl+x`) – **opens nano editor (ctrl+o = write out and save, ctrl+x = exit)**
 - l. `–help` – **display a usage message and exit**
 - m. `TAB` – **auto completes directories and some commands**
 - n. `Ctrl+a` – **go to beginning of line (home)**
 - o. `Ctrl+e` – **go to end of line (end)**
 - p. `Ctrl+r` – **recall last command including specified characters**
 - q. `Ctrl+k` – **cut the line after the cursor to the clipboard**
 - r. `Ctrl+u` – **cut/delete the line before the cursor to the clipboard**
 - s. `Ctrl+l` – **clear screen**

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

Absolute path: `cd /Users/lilly/Desktop`

Relative path: `cd lilly/Desktop`

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

`scp -r Users/lilly/Desktop/Example Folder Users/lilly/Documents`

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

`cd /Users/lilly/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. **command-S or ctrl-S**
 - 3.to commit files for saving. Use '-m' to include a message. **git commit**
 - 4.to push your changes to GitHub. **git push**

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