

Type out definitions for the following commands and shortcuts in your own words:

- a. pwd** – This command stands for print working directory. With this command, you are able to determine the current directory you are in.
- b. mkdir** – Short for make directory, this command enables you to make a directory or folder.
- c. cd** – stands for change directory, you use this command to change to another defined directory.
- d. cd ..** – Takes you to the previous directory one directory at a time.
- e. ls** – short for list; used to list the contents of a directory
- f. rm and the -r flag** – short for “remove”; rm by itself is used to remove a file, but with the -r flag you can remove/delete a directory. It’s important to note that this action is not reversible.
- g. cat** – This command has multiple uses. You can use it to display the contents of a file (**cat file1.txt**), combine two files (fileA.txt and fileB.txt) to make fileC.txt that contains the content of fileA.txt and fileB.txt (**cat fileA.txt fileB.txt > fileC.txt**), create a file and add content to it all in the same command line (**cat > test_file.txt “Write content of the file”**), and also print out the contents of a file including the line numbers (**cat -n test_file.txt**).
- h. head** – displays the **first** 10 lines of a file
- i. tail** – displays the **last** 10 lines of a file
- j. scp** – stands for secure copy; used to copy a file or directory into another location
- k. nano** (including Ctrl+o and Ctrl+x) – nano opens up a file to write content in. Ctrl+o is referred to as “write out” and it saves the current content of the file. Ctrl + x allows you to exit the file.
- l. --help** – used with commands to display a summary of what a certain command does (e.g. ls --help)
- m. TAB** – helpful key command to use to complete a command instead of having to write it out. For example, if I want to go to a directory named “Fall_2024_materials” I can just type “cd Fall_” then hit tab and then the path to the directory is autocompleted to “cd Fall_2024_materials/”
- n. Ctrl+a** – moves the cursor to the beginning of the current command line. Helpful because you can’t use your mouse to click to the beginning of the command line.
- o. Ctrl+e** – does the opposite of ctrl + a; moves the cursor to the end of the current command line.
- p. Ctrl+r** – used to start a reverse search through your command history. For example, if I do ctrl + r “scp” an example command that would show up is “scp /mnt/c/users/anmol/downloads/1a6m.pdb \$HOME/” or whatever is the most recent command you used containing that contains what you’re searching for.
- q. Ctrl+k** – deletes everything from the cursor position to the end of the command line; similar to doing ctrl + delete
- r. Ctrl+u** – deletes everything to the left of the cursor position, it’s like doing ctrl + backspace
- s. Ctrl+l** – clears the commands you written above the current line so all you see after “ctrl + l” is just one command line to write in.

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

Absolute path: cd /mnt/c/users/anmols/Desktop

Relative path (if I’m starting from /mnt/c/users/anmols/Downloads): cd ../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/?

```
cd /mnt/c/users/anmols/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 -m "your message"** 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 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.