**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.
  1. Pwd - Displays the current working directory path.
  2. Mkdir - Creates a new directory.
  3. cd <dir> - Changes the current directory to the specified directory.
  4. cd .. - Moves up one directory level to the parent directory.
  5. Ls - Lists files and directories in the current directory.
  6. rm and the -r flag - rm removes files or directories, and the -r flag allows it to remove directories and their contents recursively.
  7. cat - Concatenates and displays the contents of a file.
  8. Head - Displays the first few lines of a file.
  9. Tail - Displays the last few lines of a file.
  10. scp - Securely copies files between hosts over a network.
  11. nano (including Ctrl+o and Ctrl+x) - text editor where Ctrl+o saves the file, and Ctrl+x exits the editor.
  12. –help - Provides help information about a command and its usage.
  13. TAB - Auto-completes commands or file names in the terminal.
  14. Ctrl+a - Moves the cursor to the beginning of the line in the terminal.
  15. Ctrl+e - Moves the cursor to the end of the line in the terminal.
  16. Ctrl+r - Searches through the command history in the terminal.
  17. Ctrl+k - Deletes text from the cursor to the end of the line.
  18. Ctrl+u - Deletes text from the cursor to the beginning of the line.
  19. Ctrl+l - Clears the terminal screen.
* What command would you use to navigate to your Desktop from /Users/ using an absolute path? Relative path?

For absolute path, cd /Users/tushy/Desktop. For relative path, cd ./tushy/Desktop

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

cp -r ~/Desktop/"Folder" ~/Documents/

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

cd /Users/tushy/Documents

**Fill in the blank:**

* To push your local changes to GitHub, use the following sequence of commands:

Git status to view any unsaved changes.

git add. to save all files, or to save a specific file/folder.

git commit -m ""to commit files for saving. Use ‘-m’ to include a message.

git push origin <branch-name> 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**