

## Shell Commands

1. pipe and filter operator: `|`
2. **grep** can take a regular expression as an input or a parameter
3. count the number of lines in the file of *file.txt*: **wc -l file.txt**
4. list all files with "cs" in their names (case insensitive): **ls | grep -i cs**
5. count the number of .cc files in the current directory using the "wc" word count command: **ls \*.cc | wc -l**
6. count the number of .h files in the current folder and put the result in a file named "HeaderFileNumber.txt": **ls \*.h | wc -l > HeaderFileNumber.txt**
7. file descriptors for the Standard Output (default: /dev/stdout) and Standard Error (default: /dev/stderr) in shell scripts: **1, 2**
8. redirect error and output messages of the command *./script.sh* to /dev/null: **./script.sh &>/dev/null**
9. **tail** displays the last 10 lines of its input
10. **pwd** prints the user's current working directory
11. If an executable file named "doxygen" is located in the "bin" subfolder in a user's home directory "/home/liu", which of the following command in Bash may NOT be able to locate and run the program? **cd ~/bin doxygen**
12. **more** can list the content of a text file screen by screen (not all at once because a file may be longer than what can fit in on a screen)
13. append "Hello" to a file named "README.md": **echo "Hello" >> README.md**
14. use **scp** to copy a file *README.md* in the current folder to a folder */home/eecs/cs3560* on a remote computer named *pu1.cs.ohio.edu* under username *eecs*: **scp ./README.md eeecs@pu1.cs.ohio.edu:/home/eecs/cs3560**
15. use **scp** to copy the directory */home/eecs/cs3560* and all of its content on computer *pu1.cs.ohio.edu* under username *eecs* to current folder on the local computer: **scp -r eeecs@pu1.cs.ohio.edu:/home/eecs/cs3560 ./**