

## Orientation Quiz 2: Linux

On my honor, as a Carnegie-Mellon Africa student, I have neither given nor received unauthorized assistance on this work.

## Commands:

For each of these, list the command and flag(s) needed to give the functionality. Give us enough detail to know that you know the answer:

1. `ls -l` give a long listing of files and/or directories
2. `chmod` change the permissions of a file
3. `cat` display the contents of a file
4. `mkdir` create a new directory
5. `grep` search contents of file(s) for pattern(s)
6. `wc` count the number of lines/words/chars in a file
7. `vi` text editor
8. `sort` sort the contents of a file
9. `mv` move to a different directory
10. `rm` remove file(s)
11. `pwd` display the current working directory
12. `sed` stream editor (non-interactive)
13. `echo $var` display the contents of a shell variable

## True/False:

14. **F:** The command `export TODAY=`date`` (single quotes around **date**) sets a shell variable named **TODAY** equal to the output of the **date** command.
15. **F:** The command `find . -name '*.ch'` lists all files under the current directory and any subdirectories, whose names end in **.ch** (for example, **tst1.ch**).
16. **F:** A Linux shell script must be compiled before it can be executed (run).
17. **T:** As a competent UNIX user, you are now empowered to make fun of all other operating systems
18. **T:** The command `sed -e 's/[Ll]inux/LINUX/' a_file` will change all occurrences of the word **Linux** or **linux** to **LINUX** in a file named **a\_file**.
19. **T:** The command `grep '[A-Z]' /tmp/*` will display the files under **/tmp** whose names contain a capital letter.
20. **T:** The command `ls -d /tmp/*a*` will display all of the files under **/tmp** whose names contain the character **a**.
21. **T:** The command `ls -d /tmp/* | grep a` will display all of the files under **/tmp** whose names contain the character **a**.
22. **F:** The command `echo #hi there` causes the string **hi there** to be displayed on your screen.
23. **F:** The command `ls | less` causes the **ls** command to save its output into a file named **less**.

## Short Answer

24. What is the full UNIX command to display the online help for the chmod command?:

Answer: **man chmod**

25. What is the full UNIX command to display today's date and save the output in a file named Today?

Answer: **date > Today**

26. What is the full UNIX command to display the contents of a file named **cat** in the **/misc** directory no matter what the current directory is?

Answer: **cat /misc/cat**

27. What is the full UNIX command to search the contents of all files in the current directory for the string "LINUX"?

Answer: **grep "LINUX" ./\***

28. What is the full UNIX command to display the absolute path of your current working directory, and save the output in a file called **lamHere.out** in the **/tmp** directory?

Answer: **pwd > /tmp/lamHere.out**

29. What is the UNIX command to list all files in the current directory whose names begin with either an 1, 2, or A, followed by anything else, ending with the string ".sv"?

Answer: **ls -a | grep "[12A]\*.sv"**

30. What is the UNIX command to create a new directory named **Dogs** in the **/animals** directory. Assume that your current working directory is **/home/unix1** (and stay there).

Answer: **mkdir /animals/Dogs**

31. What two things must you do to ensure that a shell script will run whenever you type its name followed by <ENTER>?

Answer: **Putting its location in path and giving it the execute permission**

32. What exact string will be displayed on standard-out (the screen) when these 2 commands are executed?

```
mystery=`echo solved.` # note that is a backquote
echo "The mystery is $mystery"
```

Answer: **The mystery is solved.**