

PRINT Name: \_\_\_\_\_ Lab Section:   

Test Version: \_\_\_\_\_ One-Answer Multiple Choice - 50 Questions - 25 of 25%

1. Read **all** the instructions and **both** sides (back and front) of all pages.
2. Put the **Test Version** above into **NO. OF QUESTIONS** and **NO. OF STUDENTS**
3. Answer the questions you know, first. One Answer Only per question.
4. Manage your time when answering questions on this test!

1. [27/113] In an empty directory, how many words are in file **foo** after this command line: `date >.bar >.out ; ls >foo`  
a. 3            b. 4            c. 2            d. 1            e. 0
2. [28/112] What is the output on your screen of this command line:  
`echo hi >out | wc -l`  
a. 3            c. 1  
d. no output    e. 0
3. [34/112] In an empty directory, how many arguments are passed to the **wc** command in this command line:  
`touch xx yy >zz 123 .a b. ; wc ??`  
a. 0            b. 1            c. 5            d. 2            e. 4
4. [35/112] In an empty directory, what is the output on your screen of this command line: `echo hi >foo ; cp foo bar | wc -l`  
a. 2            b. no output    c. 1  
d. 0            e. 3
5. [36/113] If file **a** contains 2 lines, and file **b** contains 3 lines, then how many lines are in file **c** after this command line:  
`ln a e ; ln b d ; ln d c ; cat e b >c`  
a. 2            b. 4            c. 5            d. 3            e. 0
6. [36/112] If the current directory contains 2 visible files and 3 visible sub-directories, what is the output on your screen of this command: `echo */.`  
a. \*/.            b. 5 pathnames  
c. no output      d. 3 directory names  
e. 2 file names

7. [37/112] Given my directory **dir** and my file **dir/f** owned by me, which permissions allow me to delete the file **dir/f** from the directory, but not change the content (data) in the file?  
a. Permissions **600** on directory **dir** and **500** on file **dir/f**.  
b. Permissions **300** on directory **dir** and **500** on file **dir/f**.  
c. Permissions **700** on directory **dir** and **200** on file **dir/f**.  
d. Permissions **600** on directory **dir** and **300** on file **dir/f**.  
e. Permissions **500** on directory **dir** and **500** on file **dir/f**.
8. [39/113] Given this successful command line (note the dot argument):  
`cd /tmp ; mkdir dir ; cd dir ; chmod u-x .`  
Which of the following subsequent commands will execute without any "permission denied" errors?  
a. `ls /tmp/dir/..`                            b. `ls /tmp/dir`  
c. `ls .`    d. `ls ..`  
e. `ls /tmp/dir/.`
9. [40/113] If my current working directory is **/home**, and my home directory is **/home/foo**, which command copies file **/bin/ls** into my home directory under the name **xx**?  
a. `cp ../../bin/./ls /foo/xx`  
b. `cp ../home/./foo/./bin/ls foo/xx`  
c. `cp ../bin/ls ../foo/xx`  
d. `cp ../foo/./bin/ls ../home/foo/xx`  
e. `cp /foo/../../bin/ls /foo/./xx`
10. [41/113] How many arguments are passed to the command by the shell on this command line:  
`<wc wc " 1 '2 3' 4 " 5 6 ' 7 " 8 " ' >wc 9`  
a. 6            b. 3            c. 4            d. 5            e. 2
11. [41/113] The option to **ls** that shows which names are directories is:  
a. **-i**            b. **-l**            c. **-1**            d. **-d**            e. **-a**
12. [41/113] What type and permissions result from this command line:  
`umask 623 ; touch newfile ; ls -l newfile`  
a. `-rw--w--wx`            b. `-r-x-w--wx`            c. `----r---wx`  
d. `---xr-xr--`            e. `----r--r--`

13. [43/113] In an empty directory, what is the output on your screen of this command line: `echo hi >foo >bar ; cat foo`
- `hi`
  - no output
  - `cat: foo: No such file or directory`
  - `hi >foo`
  - `hi >foo >bar`
14. [47/113] How do you search for the word `nongraphic` in the man page for `ls`?
- type `man ls -nongraphic` at the shell
  - type `man ls` at the shell, then `/nongraphic`
  - type `man nongraphic | grep ls` at the shell
  - type `man -k nongraphic` at the shell
  - type `man ls` at the shell, then `^F` (CTRL-F), then `nongraphic`
15. [47/112] What is the output on your screen after this command line:  
`echo hi | wc >wc -wc`
- `1 3`
  - no output
  - `1 2`
  - `hi`
  - `0 0`
16. [49/113] In an empty directory, what is the output on your screen after this command line: `date >.foo >.bar ; ls *`
- `.foo .bar`
  - no output
  - `. .. .foo .bar`
  - `*`
  - an error message from `ls` saying `*` does not exist
17. [52/113] If file `a` contains 2 lines, and file `b` contains 3 lines, then how many lines are in file `c` after this command line:  
`cat a a >c ; head b >>a ; cat c b >c a`
- 10
  - 7
  - 8
  - 0
  - 12

18. [53/113] Given my directory `dir` and my file `dir/f` owned by me, which permissions allow me to access and change or create new content (data) in the file `dir/f` but not delete the file?
- Permissions `200` on directory `dir` and `200` on file `dir/f`.
  - Permissions `400` on directory `dir` and `400` on file `dir/f`.
  - Permissions `500` on directory `dir` and `100` on file `dir/f`.
  - Permissions `600` on directory `dir` and `700` on file `dir/f`.
  - Permissions `100` on directory `dir` and `200` on file `dir/f`.
19. [53/113] If file `a` contains 2 lines, and file `b` contains 3 lines, then how many lines are in file `c` after this command line:  
`ln a d ; ln d e ; ln b f >c`
- 2
  - 4
  - 3
  - 0
  - 5
20. [55/113] What is the link count of directory `dir` after this set of successful commands?  
`mkdir dir ; cd dir ; touch a b c ; mkdir d e`
- 4
  - 2
  - 3
  - 7
  - 5
21. [55/113] What is true about this output from `ls -il foo bar`?
- ```
861 -rw-r--r-- 2 root root 3 Jan 24 01:03 foo
861 -rw-r--r-- 2 bin root 3 Jan 24 01:03 bar
```
- this output is not possible
  - `foo` and `bar` are names for the same file
  - `foo` and `bar` are names for different files
  - `foo` and `bar` are two of three names for this file
  - `foo` and `bar` each have three names (six names total)
22. [56/113] If a shell GLOB pattern fails to match anything, what happens by default? The shell:
- removes the pattern and passes nothing
  - returns the closest match to the pattern
  - gives a warning message but continues
  - passes the pattern unchanged to the command
  - gives an error message and does not execute

23. [56/113] What is the output of this command line in an empty directory:  
`ls *`
- an error message from `ls` saying `*` does not exist
  - no output on screen
  - `*`
  - `.` `..`
  - `.`
24. [57/112] In a directory containing one file named `mt`, what is the output on your screen after this command line: `ls 2>/dev/null nosuchfile`
- `nosuchfile`
  - `mt`
  - `ls: nosuchfile: No such file or directory`
  - no output
  - `bash: 2>/dev/null: command not found`
25. [57/113] What is in file `foo` after this command line:  
`echo 1 2 >foo 3`
- `1 2`
  - `echo 1 2`
  - `3`
  - `1 2 3`
  - nothing (empty file)
26. [57/113] Which pathname almost always leads to the same file named:  
`/bin/ls`
- `/bin/./bin/./ls`
  - `./bin/ls`
  - `./bin/./ls/.`
  - `/bin/./ls`
  - `./bin/./ls`
27. [58/112] If file `a` contains 2 lines, and file `b` contains 3 lines, then how many lines are output on your screen by this command line: `cat a | cat b`
- no output
  - `2`
  - `0`
  - `5`
  - `3`
28. [58/113] Which command line displays all the non-hidden names in the current directory that contain the case-insensitive word `me` (and no others)?
- `echo *[Mm][Ee]*`
  - `echo *[me]*`
  - `echo *{M,m,E,e}*`
  - `echo ?[MmEe]*`
  - `echo *[MmEe]*`

29. [60/113] Given an existing file of yours named `cat`, what is the output on your screen of this command line:  
`echo xx >cat ; head cat >cat ; wc cat`
- `1 1 3 cat`
  - `1 1 2 cat`
  - no output
  - `0 0 0 cat`
  - `2 2 4 cat`
30. [60/113] What type and permissions result from this command line:  
`umask 745 ; mkdir newdir ; ls -ld newdir`
- `d----w--w-`
  - `drwxr--r-x`
  - `d----wx-w-`
  - `drw-r--r--`
  - `drwx-wx-w-`
31. [61/113] How many lines are in the file `out` after this command line:  
`date >f ; ls f >>f ; cat f f >out`
- `0`
  - `2`
  - `4`
  - `6`
  - `1`
32. [62/113] What command shows all the lines in file `cow` that contain the string `pig`?
- `grep cat cow pig`
  - `grep pig >cow`
  - `cat cow > grep pig`
  - `grep pig <cow`
  - `grep cow pig`
33. [62/113] What is the correct syntax to redirect both standard output and standard error into the same output file?
- `date 1>out 2>out`
  - `date 1>out 2>1`
  - `date >out 2>&1`
  - `date 2>&1 >out`
  - `date 2>1 >out`
34. [63/113] Which command line below outputs only lines 6-10 of the file named `foo`?
- `tail -15 foo | head -5`
  - `tail -10 foo | head -6`
  - `head -10 foo | tail -6`
  - `head -10 foo | tail -5`
  - `head -5 foo | tail -10`
35. [65/113] What is in file `c` after this command line:  
`echo B >b ; ln b a ; echo A >a ; ln a c ; rm a b`
- `A`
  - nothing (empty file)
  - `B`
  - no such file (nonexistent)
  - `A` followed by `B`

36. [66/113] What minimal permissions must you have on a directory to be able to execute successfully the command `ls .` from *inside* the directory?
- a. `-wx`      b. `r--`      c. `rw-`      d. `r-x`      e. `--x`
37. [68/113] How many lines are in file `out` after this command line:
- ```
date >wc >cat >out
```
- a. 1 6 29                      b. 0                      c. 0 0 0  
d. 1                              e. 2
38. [68/113] If directory `dir` contains only these four three-character file names: `.on`, `.tw`, `.th`, `.f.`, then what is the output on your screen of this command line: `echo dir/*`
- a. `dir/.f.`  
b. `dir/*`  
c. `dir/.` `dir/..` `dir/.on` `dir/.tw` `dir/.th` `dir/.f.`  
d. `dir/.on` `dir/.tw` `dir/.th`  
e. no output
39. [69/113] Which command usually goes in your `.bash_profile` file?
- a. `source .bashrc`                      b. `.bash_profile source`  
c. `.bashrc source`                      d. `cat .bashrc`  
e. `source .bash_profile`
40. [70/113] Which of these command line will make `bar` contain all of the content of `f1` followed by all of the content of `f2`?
- a. `mv f1 f2 >bar`                      b. `ln f1 f2 >bar`  
c. `echo f1 f2 >bar`                      d. `cp f1 f2 >bar`  
e. `cat f1 f2 >bar`
41. [70/113] If my current directory is `/foo`, which of these pathnames is equivalent to the file name `/foo/bar`?
- a. `./bar`                                      b. `./foo/bar`  
c. `../foo/bar/.`                              d. `../bar`  
e. `/bar`
42. [72/113] What is the link count of file `f` after this set of successful commands?
- ```
rm f ; touch f ; cp f x
ln f a ; ln x y ; ln a z ; ln z q
```
- a. 5                      b. 6                      c. 3                      d. 4                      e. 2

43. [73/113] Given this long listing:
- ```
drwxr-xr-x 296 me me 448 Dec 4 9:12 dir
```
- How many subdirectories lie immediately under `dir`?
- a. 294  
b. 448  
c. there is not enough information shown to answer the question  
d. 296  
e. 446
44. [77/113] If file `one` occupies one disk block, how many disk blocks are in use after this sequence of commands:
- ```
cp one foo ; ln foo two ; ln two bar ; ln one cow
```
- a. 2                      b. 1                      c. 4                      d. 5                      e. 3
45. [81/113] If I have a directory owned by me named `me/dir`, which action would increase its *link count* by exactly one?
- a. create one file named `me/dir2`  
b. create a directory named `me/dir/foo`  
c. create one file named `me/dir/bar`  
d. create a directory named `me/dir2`  
e. create a directory named `me/dir/.`
46. [81/111] If file `nine` contains 9 lines, each of which is the one-digit line number of the line in the file (1 through 9), what is the output on your screen of this command: `sort nine nine | tail -3 | head -1`
- a. 8 8                      b. 2 2                      c. 9                      d. 1                      e. 8
47. [92/113] If my current directory contains these five two-character file names: `z1`, `z2`, `z*`, `z?`, `??`, then which command below will remove only the single two-character name `z?` from the directory (and no others)?
- a. `rm "z?"`                                      b. `rm z?`                                      c. `rm ?\?`  
d. `rm \z?`                                      e. `rm \?`
48. [92/113] In an empty directory, how many files are created by this command line: `touch 1 "2 3" ' 4 ' 5`
- a. 4                      b. 3                      c. 6                      d. 7                      e. 5

49. [99/113] To shut down your Fedora system in an orderly fashion:
- logout from each terminal and the machine will shut down
  - type the three key [ **CONTROL** ] - [ **ALT** ] - [ **DEL** ]
  - select "System|Shut down"
  - type the three key [ **CONTROL** ] - [ **ALT** ] - [ **F1** ]
  - select VMware "VM|Power Off this virtual machine"
50. [101/113] What numeric **chmod** permissions would you use to change the permissions on a file to **r-xr--rw-**?
- a. 513      b. 546      c. 122      d. 305      e. 212

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