

PRINT Name: _____

LAB Section:

One-Answer Multiple Choice 44 Questions

Weight 15%

- ☞ Read **all** the words of these instructions and **both** sides (back and front) of all pages.
- ☞ Manage your time. Answer questions you know, first. One Answer per question.
- ☞ **PRINT** your Name and Lab on this Question Sheet. You may write or draw on this sheet.
- ☞ Use your full, unabbreviated name on the mark-sense form. Do not abbreviate your name.
- ☞ Enter your NAME, Student Number, and Answers. Fill in the bubbles with pencil, no pen.
- ☞ Leave the last question about reading all these test instructions blank. No answer. **Neniu**

1. [38/196] Remove only this one name printed with escaped characters by

```
find -ls
3 0 -rw-r--r-- 1 a a 0 Nov 5 19:13 ./a\"b'c\ d;e*f
```

 - a. `rm \"./a\"b'c\ d;e*f'`
 - b. `rm './a\"b'c\ d;e*f'`
 - c. `rm ./a\"b'c\ d;e*f`
 - d. `rm ./*a\\\"b'c\\ d\;e*f`
 - e. `rm ./*a\"b'c\ d\;e*f`
2. [41/198] What is the output on your screen of this unquoted command line:

```
mkdir a ; touch b* a/b1 a/b22 ; find a -name b?
```

 - a. no output
 - b. `b1 a/b1 a/b22`
 - c. `b1 b22`
 - d. `a/b1`
 - e. `a/b1 a/b22`
3. [45/198] In an empty directory, how many words are in file **d** after this command line:

```
echo a .b c >.d >c ; cp c .b ; ls >d
```

 - a. 2
 - b. 3
 - c. 1
 - d. 4
 - e. 0
4. [71/199] Which command line below shows only lines 5–10 of file **foo**?
 - a. `head -n 10 foo | tail -n 6`
 - b. `tail -n 10 foo | head -n 6`
 - c. `head -n 10 foo | tail -n 5`
 - d. `head -n 6 foo | tail -n 10`
 - e. `tail -n 15 foo | head -n 5`

5. [72/199] Create a symbolic link under **/lib** named **foo** that has target **bar**
 - a. `ln -s /lib/bar foo`
 - b. `ln -s foo /lib/bar`
 - c. `ln -s bar /lib/foo`
 - d. `ln -s /lib/foo bar`
 - e. `ln -s /lib/bar /lib/foo`
6. [74/199] In an empty directory, what is the output on your screen after this command line:

```
touch .foo >.bar ; echo .?*
```

 - a. `.bar .foo`
 - b. an error message from **echo** saying `.?* does not exist`
 - c. `. .. .bar .foo`
 - d. `.. .bar .foo`
 - e. `.?*`
7. [89/199] How many arguments and options are there to the command:

```
ls -la ls
```

 - a. Two arguments: one option argument and two command name arguments.
 - b. Two arguments: one option argument and one command name argument.
 - c. Three arguments, two of which are options.
 - d. Three arguments, one of which contains two options.
 - e. Two arguments, one of which contains two options.
8. [91/198] What is true about this output from `ls -il foo bar`?

```
23 -rwxrwxrwx 2 bin bin 3 Jul 31 12:33 foo
23 -r--r--r-- 2 bin bin 3 Jul 31 12:33 bar
```

 - a. **foo** and **bar** are two of three names for the same file
 - b. **foo** and **bar** are names for the same file
 - c. **foo** and **bar** are names for different files
 - d. **foo** and **bar** each have three names (six names total)
 - e. this output is not possible
9. [92/197] If **/usr/bin/foo** is a program that outputs **one** and **/bin/foo** is a program that outputs **two** what would be the output on your screen of this two command sequence:

```
PATH=/bin:foo:/usr/bin:foo ; foo
```

 - a. **two** followed by **one**
 - b. **two**
 - c. **one** followed by **two**
 - d. `bash: foo: command not found`
 - e. **one**

10. [97/199] Given this long listing:
`drwxr-xr-x 123 me me 456 Dec 4 9:12 dir`
 How many subdirectories lie immediately under `dir`?
- 123
 - 454
 - 456
 - 121
 - there is not enough information shown to answer the question
11. [101/198] If I am in directory `/home/onk` and `mt` is an empty sub-directory, what is true after this command line:
`touch foo moo ; mv ./mt/./moo ./onk/brk`
- there is a second copy of the file `moo` in the file named `brk`
 - the command fails because path `./mt/./moo` does not exist
 - the directory `onk` now contains a file named `brk`
 - the command fails because path `./onk/brk` does not exist
 - the directory `mt/..` now contains a file named `brk`
12. [101/196] In an empty directory, what is in file `foo` after this command line:
`head nosuchfile | wc -l >foo`
- nothing (empty file)
 - `nosuchfile`
 - `1 nosuchfile`
 - `1`
 - `0`
13. [101/198] In `/var/lib` using `ls -l` shows a symbolic link `foo ->/bin/ls` then dereference the shortest absolute path of `foo` with no symbolic links:
- `/foo/bin/ls`
 - `/var/lib/foo/bin/ls`
 - `/bin/ls`
 - `/var/lib/bin/ls`
 - `/var/lib/bin/ls/foo`
14. [102/198] 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 b >c ; cat a >>b ; cat c b >c a`
- 7
 - 12
 - 5
 - 8
 - 10
15. [104/199] File `a` contains 2 lines, and file `b` contains 3 lines, then how many lines are in file `c` after this command line: `ln b c ; cat b a >c`
- 2
 - 0
 - 4
 - 3
 - 5

16. [105/199] File `a` occupies one disk block. How many disk blocks are in use after this sequence of commands:
`cp a b ; ln b c ; cp c d ; ln a e ; cp a d ; rm c d`
- 1
 - 5
 - 4
 - 2
 - 3
17. [105/199] Give the minimum number of directories in this pathname:
`/a/b/c/d`
- 1
 - 3
 - 5
 - 2
 - 4
18. [108/199] If `/usr/bin/foo` is a program that outputs `one` and `/bin/foo` is a program that outputs `two` what would be the output on your screen of this two command sequence:
`PATH=/etc:/usr:/bin:/usr/bin ; foo`
- `bash: foo: command not found`
 - `two`
 - `two` followed by `one`
 - `one`
 - `one` followed by `two`
19. [109/198] How many arguments are passed to the command by the shell:
`echo " 1 '2 3' 4 "5566 ' 7 "8 '999 >out`
- 2
 - 5
 - 4
 - 6
 - 3
20. [110/199] If I am in directory `/home/onk` and `mt` is an empty sub-directory, what is true after this command line:
`touch onk moo ; mkdir brk ; mv moo brk/mt`
- the directory `mt` now contains a file named `moo`
 - the directory `mt` now contains a directory named `brk`
 - the directory `mt` is still empty
 - the directory `brk` now contains a file named `moo`
 - the command fails because `brk/mt` is not a directory
21. [111/199] File `a` occupies one disk block. How many disk blocks are in use after this sequence of commands:
`ln a b ; ln b c ; cp c d ; ln c e ; rm a b c`
- 4
 - 3
 - 2
 - 5
 - 1

22. [111/196] In `/var/lib` using `ls -l` shows a symbolic link `foo` -> `../abc/bar` then dereference the shortest absolute path of `foo` with no symbolic links:
- `/var/lib/abc/bar/foo`
 - `/var/lib/foo/./abc/bar`
 - `/var/foo/./abc/bar`
 - `/var/abc/bar`
 - `/var/lib/abc/bar`
23. [112/199] If `moo` is a sub-directory that contains only the file `brk`, what happens after these commands:
- ```
touch onk ; mv ./moo/onk ./moo/brk
```
- the command fails because the name `onk` does not exist
  - a new file named `onk` is created in `moo`
  - the command fails because `brk` is not a directory
  - there is a second copy of the file `onk` in the file named `brk`
  - there is only the file named `onk` in the `moo` directory now
24. [114/199] If a shell GLOB pattern fails to match anything, the shell:
- returns the closest match to the pattern
  - gives an error message and does not execute
  - removes the pattern and passes nothing
  - passes the pattern unchanged to the command
  - gives a warning message but continues
25. [120/199] If files occupy one disk block, how many disk blocks will the system free up if I remove these four file names:
- ```
111 -rw-r--r-- 2 me me 1 Jan 1 1:00 a
111 -rw-r--r-- 2 me me 1 Jan 1 1:00 b
222 -rw-r--r-- 3 me me 1 Jan 1 1:00 c
222 -rw-r--r-- 3 me me 1 Jan 1 1:00 d
```
- 2
 - 3
 - 4
 - 0
 - 1
26. [120/199] If my current directory is `/moo`, which of these pathnames is equivalent to the pathname `/moo/a/b/c`?
- `../moo/b/c`
 - `../a/b/c`
 - `a/./a/b/c`
 - `./moo/a/b/c`
 - `/a/b/c`

27. [124/199] If files occupy one disk block, how many disk blocks will the system free up if I remove these four file names:
- ```
111 -rw-r--r-- 2 me me 1 Jan 1 1:00 a
222 -rw-r--r-- 3 me me 1 Jan 1 1:00 b
222 -rw-r--r-- 3 me me 1 Jan 1 1:00 c
222 -rw-r--r-- 3 me me 1 Jan 1 1:00 d
```
- 3
  - 0
  - 2
  - 1
  - 4
28. [124/195] Which command line usually outputs the pathname `/bin/cp`?
- `which cp`
  - `cat /bin/cp`
  - `cd /bin ; echo cp`
  - `cd /bin ; ls cp`
  - `cd /bin ; file cp`
29. [125/198] File `a` occupies one disk block. How many disk blocks are in use after this sequence of commands:
- ```
cp a b ; ln b c ; cp c d ; cp a c ; rm c d
```
- 4
 - 1
 - 2
 - 5
 - 3
30. [126/198] Dereference the following symlink `bar` into its equivalent absolute path: `ln -s ../../a/./foo /tmp/a/b/bar`
- `/tmp/b/bar`
 - `/tmp/a/b/bar`
 - `/tmp/a/foo`
 - `/tmp/foo`
 - `/tmp/b/foo`
31. [128/199] If files occupy one disk block, how many disk blocks will the system free up if I remove these four file names:
- ```
111 -rw-r--r-- 1 me me 1 Jan 1 1:00 a
222 -rw-r--r-- 2 me me 1 Jan 1 1:00 b
333 -rw-r--r-- 2 me me 1 Jan 1 1:00 c
333 -rw-r--r-- 2 me me 1 Jan 1 1:00 d
```
- 2
  - 4
  - 1
  - 0
  - 3
32. [131/199] File `a` occupies one disk block. How many disk blocks are in use after this sequence of commands:
- ```
cp a b ; ln b c ; ln c d ; ln a e ; rm a b c
```
- 1
 - 4
 - 3
 - 5
 - 2
33. [135/199] Which line allows the shell to find the `assignment07check` command?
- `PATH=$PATH:~idallen/cst8207/18f/assignment07`
 - `PATH=assignment07check:$PATH`
 - `PATH=$PATH:assignment07check`
 - `PATH=whereis assignment07check`
 - `PATH=which assignment07check`

34. [142/199] If files occupy one disk block, how many disk blocks will the system free up if I remove these four file names:

```
111 -rw-r--r-- 3 me me 1 Jan 1 1:00 a
111 -rw-r--r-- 3 me me 1 Jan 1 1:00 b
222 -rw-r--r-- 3 me me 1 Jan 1 1:00 c
222 -rw-r--r-- 3 me me 1 Jan 1 1:00 d
```

 a. 2 b. 0 c. 3 d. 1 e. 4
35. [144/199] File **a** contains 2 lines. File **b** contains 3 lines. How many lines are output on your screen by this command line: `head b | head a`
 a. 10 b. 3 followed by 2 c. 2
 d. 3 e. 2 followed by 3
36. [146/199] How do you execute the program **bar** in the current directory?
 a. `$HOME/bar` b. `bar` c. `/bar`
 d. `./bar` e. `~/bar`
37. [148/198] What is the link count of directory **x** after this set of successful commands? `mkdir x ; mkdir x/a x/b x/a/c x/b/d`
 a. 3 b. 5 c. 4 d. 2 e. 6
38. [151/199] How many files are touched or created?

```
touch " 1 '2 3' 4 " 56 ' 7 "8 '
```

 a. 6 b. 3 c. 2 d. 5 e. 4
39. [153/199] If files occupy one disk block, how many disk blocks will the system free up if I remove these four file names:

```
111 -rw-r--r-- 1 me me 1 Jan 1 1:00 a
222 -rw-r--r-- 1 me me 1 Jan 1 1:00 b
333 -rw-r--r-- 2 me me 1 Jan 1 1:00 c
444 -rw-r--r-- 2 me me 1 Jan 1 1:00 d
```

 a. 4 b. 1 c. 3 d. 2 e. 0
40. [157/198] What is the link count of directory **x** after this set of successful commands? `mkdir x ; cd x ; touch a ; ln a b ; mkdir c`
 a. 4 b. 7 c. 5 d. 3 e. 6

41. [158/199] What is true about this output from `ls -il foo bar`

```
15 -rwxrwxrwx 2 bin bin 3 Jul 31 12:33 foo
23 -rwxrwxrwx 2 bin bin 3 Jul 31 12:33 bar
```

 a. **foo** and **bar** are names for the same file
 b. **foo** and **bar** are names for different files
 c. this output is not possible
 d. **foo** and **bar** are two of three names for the same file
 e. **foo** and **bar** each have three names (six names total)
42. [158/199] What is true about this output from `ls -il foo bar`

```
15 -rwxrwxrwx 2 bin bin 3 Jul 31 12:33 foo
15 -rwxrwxrwx 2 bin bin 3 Jul 31 12:33 bar
```

 a. **foo** and **bar** each have three names (six names total)
 b. **foo** and **bar** are names for the same file
 c. this output is not possible
 d. **foo** and **bar** are two of three names for the same file
 e. **foo** and **bar** are names for different files
43. [166/198] What is in file **c** after this command line:
`echo me >a ; ln a b ; ln b c ; echo hi >c ; rm a b`
 a. **me** followed by **hi** b. no such file (nonexistent)
 c. **me** d. **hi**
 e. nothing (empty file)
44. [172/198] If files occupy one disk block, how many disk blocks will the system free up if I remove these four file names:

```
111 -rw-r--r-- 1 me me 1 Jan 1 1:00 a
222 -rw-r--r-- 1 me me 1 Jan 1 1:00 b
333 -rw-r--r-- 1 me me 1 Jan 1 1:00 c
444 -rw-r--r-- 1 me me 1 Jan 1 1:00 d
```

 a. 4 b. 0 c. 3 d. 1 e. 2