

Test Version: _____ Print Name: _____

Multiple Choice - 46 Questions - 15 of 15%

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!
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1. [23/87] What is the link count of file **f** after this set of successful commands?

```
rm f ; touch f ; ln f bar  
cp bar x ; ln x y ; ln bar z ; ln z a
```

a. 1 b. 2 c. 4 d. 5 e. 3
2. [24/87] If my current working directory is **/home**, and my home directory is **/home/me**, which command copies the password file into my home directory under the name **foo**?

a. `cp ../home/./me/./etc/passwd ./me/./foo`
b. `cp ../../etc/./passwd /me/foo`
c. `cp ../me/./etc/passwd ../home/me/foo`
d. `cp me/././etc/passwd ./me/foo`
e. `cp ../../etc/passwd ../me/foo`
3. [28/85] If my current directory is **/bin**, which of these pathnames is equivalent to the file name **/bin/ls**?

a. `ls/.` b. `./bin/ls`
c. `../../bin/ls` d. `../bin/ls/.`
e. `/root/bin/ls`
4. [29/86] If my current working directory is **/home**, and my home directory is **/home/me**, which command copies the password file into my home directory under the name **foo**?

a. `cp ../etc/passwd ../me/foo`
b. `cp ../etc/passwd ./me/foo`
c. `cp ../home/me/./etc/passwd ./me/./foo`
d. `cp ./me/./etc/passwd ../home/me/foo`
e. `cp ../../etc/passwd /me/foo`

5. [32/86] If **foo** is a sub-directory that contains only the file **bar**, what happens after this command: `mv ./foo/bar foo/./moo`

a. the command fails because the name **moo** does not exist
b. the directory **foo** now contains only a file named **moo**
c. the command fails because the name **foo/./moo** does not exist
d. there is a second copy of the file **bar** in the file named **moo**
e. the directory **foo** is now empty
6. [32/86] If I am in my home directory named **/home/me** and **sub** is an empty sub-directory, what is true after this command line:
`touch ./fil ; mv sub/./fil ../me/cat`

a. the command fails because the path **../me/cat** does not exist
b. the directory **sub/..** now has a file named **cat** in it
c. there is a second copy of the file **fil** in the file named **cat**
d. the directory **sub** now contains only a file named **cat**
e. the command fails because the path **sub/./fil** does not exist
7. [32/87] What is the link count of file **f** after this set of successful commands?

```
rm f ; touch f ; ln f bar  
cp bar x ; ln x y ; ln bar z
```

a. 5 b. 3 c. 2 d. 1 e. 4
8. [33/86] If I am in my home directory named **/home/me** and **mt** is an empty sub-directory, what is true after this command line:
`touch ./foo ; mv ./mt/./foo ../me/bar`

a. the command fails because path **../me/bar** does not exist
b. the directory **mt** now contains only a file named **bar**
c. there is a second copy of the file **foo** in the file named **bar**
d. the command fails because path **./mt/./foo** does not exist
e. the directory **mt/..** now has a file named **bar** in it
9. [33/87] If my current directory is **/etc**, which of these pathnames is equivalent to the pathname **/etc/x/y**?

a. `../etc/y` b. `/x/y` c. `../x/y`
d. `./etc/x/y` e. `../etc/x/y`
10. [34/87] If **/etc/shadow** is a file name, which pathname always leads to the same file?

a. `/etc/../../../../shadow` b. `/etc/shadow/./.`
c. `/../../../../etc/./shadow` d. `/etc/shadow/../../../../.`
e. `../etc/shadow`

11. [34/87] 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 x b`
 a. 5 b. 4 c. 6 d. 3 e. 2
12. [36/87] If file **foo** occupies one disk block, how many disk blocks are in use after this sequence of commands:
`cp foo bar ; ln bar one ; cp one two ; ln one pig`
 a. 1 block b. 4 blocks c. 2 blocks
 d. 3 blocks e. 5 blocks
13. [37/87] If I am in my home directory named **/home/me** and **dir** is an empty sub-directory, what is true after this command line:
`touch new ; mv ./dir/../new ../me/old`
 a. the command fails because the path `../me/old` does not exist
 b. the directory **dir** now contains only a file named **old**
 c. there is a second copy of the file **new** in the file named **old**
 d. the command fails because the path `./dir/../new` does not exist
 e. the parent directory of **dir** now has a file named **old** in it
14. [37/87] What is the link count of directory **d** after this set of successful commands? `mkdir d ; cd d ; touch a ; mkdir b c d`
 a. 6 b. 2 c. 5 d. 4 e. 3
15. [38/87] If **/etc/passwd** is a file name, which pathname always leads to the same file?
 a. `./etc/./passwd` b. `./etc/passwd`
 c. `/etc/./passwd` d. `/etc/etc/./passwd`
 e. `/etc/passwd/`
16. [41/87] If my current directory is **/etc**, which of these pathnames is equivalent to the file name **/etc/passwd**?
 a. `./etc/passwd/` b. `/passwd`
 c. `./passwd` d. `./etc/passwd`
 e. `./passwd`
17. [42/87] What is the resulting link count of empty directory **dir** after this set of successful commands?
`cd dir ; touch foo ; ln foo one ; ln foo two`
 a. 2 b. 3 c. 4 d. 5 e. 1

18. [43/87] Given this `ls -il dir` long listing:
`454 drwxr-xr-x 123 me me 456 Dec 4 9:12 dir`
 How many subdirectories lie immediately under **dir**?
 a. 123 b. 456 c. 121 d. 458 e. 454
19. [44/86] If I have a directory named **c/d**, which action would increase its *link count* by exactly one?
 a. create a file named **c/d/e**
 b. create a hard link to directory **d** named **d2**
 c. create a file named **c/d2**
 d. create a directory named **c/d2**
 e. create a directory named **c/d/e**
20. [44/86] In the output of `ls -a`, a dot (period) that begins a name signifies what?
 a. A name with an unprintable character.
 b. The current directory.
 c. A name that is hidden.
 d. The parent directory.
 e. A current file.
21. [46/87] If I am in my home directory named **/home/me** and **mt** is an empty sub-directory, what is true after this command line:
`touch ../me/foo ; cp ./mt/../foo ./mt/../bar`
 a. the directory **mt** now has a file named **bar** in it
 b. the file named **foo** is now renamed to **bar**
 c. the command fails because the path `./mt/../foo` does not exist
 d. the directory **mt** is still empty
 e. the directory **mt** now contains two files
22. [46/87] 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 -rwxr-xr-x 2 bin bin 3 Nov 12 12:55 bar`
 a. **foo** and **bar** are names for different files
 b. **foo** and **bar** are two of three names for this file
 c. **foo** and **bar** each have three names (six names total)
 d. **foo** and **bar** are names for the same file
 e. this output is not possible

23. [47/87] What is the link count of file **f** after this set of successful commands?
`rm f ; touch f ; ln f bar`
`cp bar x ; ln x y ; ln y z`
a. 4 b. 2 c. 0 d. 3 e. 1
24. [50/85] If **pig** is a sub-directory that contains only the file **dog**, what happens after this command: `mv pig/dog pig/././cat`
a. the directory **pig** now contains only a file named **cat**
b. the command fails because the name **cat** does not exist
c. the directory **pig** is now empty
d. the command fails because the name **pig/././cat** does not exist
e. there is a second copy of the file **dog** in the file named **cat**
25. [50/87] What is the link count of directory **d** after this set of successful commands? `mkdir d ; cd d ; touch f ; ln f x ; ln f y`
a. 5 b. 4 c. 1 d. 3 e. 2
26. [51/87] What is true about this output from `ls -il foo bar`?
`871 -r----- 3 bin bin 2 Apr 22 10:15 foo`
`872 -r----- 3 bin bin 2 Apr 22 10:15 bar`
a. **foo** and **bar** each have two names (four names total)
b. this output is not possible
c. **foo** and **bar** each have three names (six names total)
d. **foo** and **bar** are two of three names for this file
e. **foo** and **bar** are names for the same file
27. [53/87] If you type the command **cat**, which *CTRL* key will send an **EOF** and take you back to the command prompt?
a. **^R** b. **^D** c. **^E** d. **^U** e. **^C**
28. [53/86] In a directory that contains only the file **single**, what happens after this command: `mv single double`
a. the command fails because the name **double** does not exist
b. the command fails because **single** is not a directory
c. an empty file named **double** is created
d. there is a second copy of the file **single** in the file named **double**
e. there is only the file named **double** in the directory now

29. [54/86] If **foo** is a sub-directory that contains only the file **bar**, what happens after this command: `mv foo/bar foo/moo`
a. the command fails because the name **moo** does not exist
b. an empty file named **moo** is created
c. there is a second copy of the file **bar** in the file named **moo**
d. there is only the file named **moo** in the directory now
e. the command fails because **bar** is not a directory
30. [54/87] What is the link count of directory **d** after this set of successful commands?
`mkdir d ; mkdir d/a ; mkdir d/b ; mkdir d/b/c`
a. 2 b. 5 c. 1 d. 3 e. 4
31. [55/87] What is the link count of directory **d** after this set of successful commands? `mkdir d ; touch f ; cd d ; ln ../f x`
a. 4 b. 5 c. 2 d. 3 e. 1
32. [56/87] What is true about this output from `ls -il foo bar`
`15 -r-x-----x 2 bin bin 3 Oct 30 09:23 foo`
`15 -r-x-----x 2 bin bin 3 Oct 30 09:23 bar`
a. **foo** and **bar** are names for different files
b. this output is not possible
c. **foo** and **bar** are names for the same file
d. **foo** and **bar** are two of three names for this file
e. **foo** and **bar** each have three names (six names total)
33. [58/87] What is true about this output from `ls -il foo bar`
`23 -rwxr----- 3 root root 2 Jul 31 12:33 foo`
`24 -rwxr----- 3 root root 2 Jul 31 12:33 bar`
a. **foo** and **bar** are two of three names for this file
b. **foo** and **bar** each have two names (four names total)
c. **foo** and **bar** are names for different files
d. **foo** and **bar** are names for the same file
e. this output is not possible
34. [60/87] What command can you use to delete a directory that isn't empty?
a. `mv -r dir` b. `del -r dir`
c. `rm -r dir` d. `rmdir -r dir`
e. `deldir -r dir`

35. [60/87] What is the link count of directory **d** after this set of successful commands? `mkdir d ; mkdir d/a ; touch d/b`
- a. 2 b. 4 c. 1 d. 3 e. 5
36. [60/87] Which Unix command line deletes a directory and everything inside it?
- a. `deltree -all dir` b. `rmdir -r dir`
 c. `rmdir -all dir` d. `rm -all dir`
 e. `rm -r dir`
37. [61/87] What is true about this output from `ls -il foo bar`
- ```
35 -rw-rw-r-- 2 bin bin 3 Jan 24 01:03 foo
36 -rw-rw-r-- 2 bin bin 3 Jan 24 01:03 bar
```
- a. **foo** and **bar** are names for the same file  
 b. **foo** and **bar** are two of three names for this file  
 c. **foo** and **bar** each have two names (four names total)  
 d. **foo** and **bar** each have three names (six names total)  
 e. this output is not possible
38. [63/87] In the output of `ls -a`, the one-character name `.` signifies what?
- a. A current file.  
 b. The current directory.  
 c. A name that is hidden.  
 d. The parent directory.  
 e. A name with an unprintable character.
39. [65/87] If you type the command `echo 'missing quote` which *CTRL* key will **interrupt** it and take you back to the command prompt?
- a. `^I`            b. `^U`            c. `^D`            d. `^R`            e. `^C`
40. [65/87] In the output of `ls -a`, the two-character name `..` signifies what?
- a. The current directory.  
 b. The parent directory.  
 c. A file or directory with double links.  
 d. A hidden file.  
 e. The root directory.
41. [68/87] If you type the command `sleep 60`, which *CTRL* key will **interrupt** it and take you back to the command prompt?
- a. `^U`            b. `^D`            c. `^R`            d. `^I`            e. `^C`

42. [68/87] What would you type to find the string **tony** in the file `/etc/passwd`?
- a. `grep /etc/passwd tony`  
 b. `grep tony /etc/passwd`  
 c. `cat tony /etc/passwd`  
 d. `find /etc/passwd -name tony -print`  
 e. `find /etc/passwd -user tony -print`
43. [70/87] Which of the following is true, given this long directory listing:
- ```
drwxr-x--x 512 ian user 712 May 30 12:35 dir
```
- a. The number 712 is the inode number of this directory.
 b. The number 512 is the count of links (names) this directory has.
 c. The number 512 is the size of this directory.
 d. The number 712 is the count of links (names) this directory has.
 e. The number 512 is the inode number of this directory.
44. [71/87] Which command line below does not show any lines from inside the file **bat**?
- a. `head bat` b. `more bat` c. `less bat`
 d. `tail bat` e. `ls bat`
45. [74/87] What is the output of this successful command sequence?
- ```
cd /home/dir ; mkdir one ; mkdir two ; pwd
```
- a. `/home/dir/one/two`                      b. `/home/dir/two`  
 c. `/home/dir/one`                            d. `/two`  
 e. `/home/dir`
46. [84/87] What command can you use to delete an empty directory?
- a. `delete`                                  b. `mvdir`                                  c. `erase`  
 d. `rmdir`                                    e. `deldir`