

Test Version: 591

Name: _____

Multiple Choice - 147 Questions - 0 of 0%

1. Read all the instructions and both sides (back and front) of all pages.
2. Answer the questions you know, first. One Answer Only per question.
3. Manage your time when answering questions on this test!

(Office use only: 59 126 54 80 70 69 124 73 136 19 49 107 101 57 43 79 89 36 133 44 135 16 12 93 32 134 67 10 141 144 90 74 85 63 33 109 75 66 103 72 129 113 29 99 106 87 102 71 24 84 51 56 55 35 21 13 25 61 138 95 34 147 118 2 130 125 127 23 142 38 45 110 98 97 139 146 40 46 115 6 3 11 27 137 122 83 53 68 76 104 131 17 64 31 121 78 47 20 39 108 82 58 132 42 128 4 65 26 52 116 7 111 91 96 9 37 88 100 94 30 22 8 119 60 112 28 15 120 77 114 62 105 48 1 140 145 117 5 18 86 50 143 92 81 123 14 41)

1. What command displays the sizes of files in the current directory?
 a. `cat -s` b. `ps -s` c. `ps -l`
 d. `ls -p` e. `ls -l`
2. 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 512 is the size of this directory.
 b. The number 712 is the count of links (names) this directory has.
 c. The number 712 is the inode number of this directory.
 d. The number 512 is the count of links (names) this directory has.
 e. The number 512 is the inode number of this directory.
3. What can you do to get back (redo) the last command you typed to the **bash** (Linux) shell?
 a. Type [ALT]-[F2]
 b. Use the "UpArrow" key.
 c. Type [CONTROL]-[ALT]-[UP]
 d. Type [CONTROL]-[BACKSPACE]
 e. Use the "PageUp" key.
4. What is the output of this successful command line?
`cd /home/myhome ; mkdir foo ; mkdir bar ; pwd`
 a. `/home/myhome/bar` b. `/home/myhome/foo/bar`
 c. `/home/myhome/foo` d. `/home/myhome`
 e. `/bar`
5. What is the link count of directory **dir** after this set of successful commands?
`mkdir dir ; cd dir ; touch foo ; mkdir a b c`
 a. 2 b. 1 c. 4 d. 3 e. 5

6. What is the link count of directory **a** after this set of successful commands?
`mkdir a ; mkdir a/b ; mkdir a/c ; mkdir a/b/c`
 a. 3 b. 1 c. 2 d. 5 e. 4
7. Which command removes adjacent duplicate lines from a file?
 a. `dup` b. `uni` c. `uniq`
 d. `unique` e. `duplicate`
8. What is the link count of directory **dir** after this set of successful commands?
`mkdir dir ; touch foo ; cd dir ; ln ../foo bar`
 a. 3 b. 4 c. 5 d. 2 e. 1
9. Which of the following pathnames almost always leads to the same file named: `/etc/passwd`?
 a. `/etc/./etc/passwd` b. `/etc/./etc/./passwd`
 c. `./etc/passwd` d. `../etc/passwd`
 e. `/etc/passwd/.`
10. If **foo** is a sub-directory that contains only the file **single**, what happens after this command: `mv ./foo/single foo/./double`
 a. the command fails because the name **double** does not exist
 b. the directory **foo** is now empty
 c. there is a second copy of the file **single** in the file named **double**
 d. the command fails because the name `foo/./double` does not exist
 e. the directory **foo** now contains only a file named **double**
11. In the output of the command `ls -ai`, the one-character name `.` signifies what?
 a. The parent directory.
 b. A name that is hidden.
 c. A current file.
 d. The current directory.
 e. A name with an unprintable character.
12. Which Unix command sequence deletes a directory and everything inside it?
 a. `rm -r dir` b. `rmdir -all dir`
 c. `erase dir` d. `erase -r dir`
 e. `deltree -all dir`

13. What would you type to find the string **tony** in the file **/etc/passwd**?
- find /etc/passwd -user tony -print**
 - grep tony /etc/passwd**
 - find /etc/passwd -name tony -print**
 - grep /etc/passwd tony**
 - cat tony /etc/passwd**
14. What command can you use to delete a directory?
- mkdir**
 - delete**
 - rmdir**
 - erase**
 - deldir**
15. If you type the command **grep pattern** which key sequence will send an EOF and take you immediately back to the command prompt?
- [CTRL-D]**
 - [CTRL-L]**
 - [CTRL-R]**
 - [CTRL-U]**
 - [CTRL-C]**
16. What is the link count of file **foo** after this set of successful commands?
- ```
rm foo ; touch foo ; ln foo bar
cp bar x ; ln x y ; ln y z
```
- 1
  - 2
  - 0
  - 4
  - 3
17. 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
```
- foo** and **bar** each have two names (four names total)
 - foo** and **bar** are names for different files
 - foo** and **bar** are two of three names for this file
 - this output is not possible
 - foo** and **bar** are names for the same file
18. If my current directory is **/usr**, which of these pathnames is equivalent to the pathname **/usr/x/y/z**?
- ./usr/x/y/z**
 - /x/y/z**
 - ../x/y/z**
 - ../usr/y/z**
 - x/./y/z**

19. Which of the following is true, given this long directory listing from **ls**:
- ```
drwxr-x--x 256 ian user 512 May 30 12:35 dir
```
- The number 256 is the octal permissions of this directory.
  - The number 512 is the size of this directory.
  - The number 256 is the inode number of this directory.
  - The number 512 is the count of links (names) this directory has.
  - The number 256 is the size of this directory.
20. If you type the command **grep pattern** which of the following key sequences will send an EOF and take you immediately back to the command prompt?
- [CTRL-C]**
  - [CTRL-L]**
  - [CTRL-D]**
  - [CTRL-U]**
  - [CTRL-R]**
21. Which of the following is true, given this long directory listing from **ls**:
- ```
drwxr-x--x 512 ian user 712 May 30 12:35 dir
```
- The number 512 is the size of this directory.
 - The number 512 is the count of links (names) this directory has.
 - The number 512 is the inode number of this directory.
 - The number 712 is the count of links (names) this directory has.
 - The number 712 is the inode number of this directory.
22. If **cow** is a sub-directory that contains only the file **dog**, what happens after this command: **mv cow/dog cow/././cat**
- the directory **cow** now contains only a file named **cat**
 - the command fails because the name **cow/././cat** does not exist
 - the command fails because the name **cat** does not exist
 - there is a second copy of the file **dog** in the file named **cat**
 - the directory **cow** is now empty
23. If **/bin/bash** is a file name, which of the following pathnames always leads to the same file?
- /bin/./bash**
 - /bin/bin/./bash**
 - ./bin/bash**
 - ../bin/./bash**
 - /bin/bash/.**

24. 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
```
- this output is not possible
  - `foo` and `bar` each have three names (six names total)
  - `foo` and `bar` are names for different files
  - `foo` and `bar` are two of three names for this file
  - `foo` and `bar` are names for the same file
25. If my current directory is `/bin`, which of these pathnames is equivalent to the file name `/bin/ls`?
- `../../bin/ls`
  - `/root/bin/ls`
  - `../bin/ls/.`
  - `./bin/ls`
  - `ls/.`
26. Which of the following is true, given this long directory listing from `ls`:
- ```
drwxr-x--x 456 ian user 123 May 30 12:35 dir
```
- The number 123 is the size in bytes of this directory.
 - The number 123 is the count of links (names) this directory has.
 - The number 456 is the inode number of this directory.
 - The number 456 is the size of this directory.
 - The number 456 is the octal permissions of this directory.
27. What is the link count of directory `d` after this set of successful commands?
- ```
mkdir d ; mkdir d/a ; touch d/b
```
- 3
  - 5
  - 1
  - 4
  - 2
28. How many arguments and options are there to the command:
- ```
wc -wc /sort
```
- Two options, no arguments.
 - A three-letter file name and a `/sort` switch option argument.
 - Two command line arguments, one of which contains two bundled options.
 - Two arguments, one of which is a single option and the other is a pathname.
 - Two arguments, no options.

29. Which of these statements is true?
- You can make a hard link to a directory.
 - If you give me write permission on a file owned by you, I can rename it.
 - To make a hard link to file "`foo`" named "`bar`", file "`foo`" must exist.
 - The "`ln`" command takes two arguments, so the maximum number of hard links a file can have is two.
 - To erase an entire line of typing, type `[CONTROL]-[E]`.
30. Which of these statements is true?
- you can only make links to files owned by you
 - you can only remove a file name if the file is owned by you
 - you can only rename a file if you are the owner of the file
 - you may be able to rename a file even if you do not own the file
 - you can only remove a file name if the file is writable by you
31. 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
```
- `foo` and `bar` each have two names (four names total)
  - this output is not possible
  - `foo` and `bar` are two of three names for this file
  - `foo` and `bar` each have three names (six names total)
  - `foo` and `bar` are names for the same file
32. What is the link count of directory `foo` after this set of successful commands?
- ```
mkdir foo ; cd foo ; touch a b c
```
- 3
 - 5
 - 1
 - 2
 - 4
33. What is the output of this successful command sequence?
- ```
cd /tmp ; mkdir one ; mkdir two ; pwd
```
- `/tmp/one/two`
  - `/tmp/one`
  - `/two`
  - `/tmp/two`
  - `/tmp`
34. What does the term "kernel" (or "nucleus") mean?
- that portion of the operating system that is always memory-resident
  - a method to get the system loaded into memory from disk/CD/tape/cards
  - software to support many users of the same machine
  - applications that are able to share the printer
  - software to support more than one program loaded

35. If my current directory is `/etc`, which of these pathnames is equivalent to the file name `/etc/passwd`?
- `./passwd`
  - `/passwd`
  - `../passwd`
  - `./etc/passwd`
  - `../etc/passwd/.`
36. Which Unix command sequence deletes a directory and everything inside it?
- `erase dir`
  - `erase -r dir`
  - `rm -r dir`
  - `deltree dir`
  - `rmdir -all dir`
37. What is the link count of directory `x` after this set of successful commands?
- ```
mkdir x ; mkdir x/y ; mkdir x/z ; mkdir x/y/z
```
- 1
 - 3
 - 5
 - 2
 - 4
38. 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
```
- 4
  - 2
  - 5
  - 3
  - 1
39. What would you type to find the string `tony` in the file `/etc/passwd`?
- `find tony /etc/passwd`
  - `find /etc/passwd tony`
  - `grep /etc/passwd tony`
  - `string tony /etc/passwd`
  - `grep tony /etc/passwd`
40. What is the link count of directory `dir` after this set of successful commands?
- ```
mkdir dir ; mkdir dir/foo ; touch dir/bar
```
- 5
 - 3
 - 2
 - 4
 - 1
41. Which of the following is true, given this long directory listing:
- ```
drwxr-x--x 71 user staff 4096 May 30 12:35 /dir
```
- The number 71 is the inode number of this directory.
  - The number 71 is the count of links (names) this directory has.
  - The number 4096 is the count of links (names) this directory has.
  - The number 4096 is the inode number of this directory.
  - The number 71 is the size of this directory.
42. Which command line below does not show any lines from inside the file `dog`?
- `less dog`
  - `more dog`
  - `tail dog`
  - `head dog`
  - `ls dog`

43. If I have a directory owned by me named `1/2`, which of the following actions would increase its *link count* by exactly one?
- create one subdirectory named `1/2`
  - create one subdirectory named `1/22`
  - create one subdirectory named `1/2/3`
  - create one file named `1/22`
  - create one file named `1/2/3`
44. What would you see if you typed this command: `cat /foo`
- The contents of your subdirectory named `foo`
  - The contents of the file `foo` located in the root directory
  - The contents of the file `foo` located in your home directory
  - The contents of the file `foo` located in the parent directory
  - The contents of your directory named `foo`
45. Which Unix command line deletes a directory and everything inside it?
- `rm -all dir`
  - `rm -r dir`
  - `deltree -all dir`
  - `rmdir -all dir`
  - `rmdir -r dir`
46. 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
```
- 5
 - 1
 - 2
 - 4
 - 3
47. What would you type to find the string `tony` in the file `/etc/passwd`?
- `grep tony /etc/passwd`
 - `file tony /etc/passwd`
 - `grep /etc/passwd tony`
 - `file /etc/passwd tony`
 - `find tony /etc/passwd`
48. What is the link count of directory `dir` after this set of successful commands?
- ```
mkdir dir ; cd dir ; touch one ; mkdir two
```
- 1
  - 4
  - 5
  - 2
  - 3

49. If I am in my home directory named `/home/myhome` and `dir` is an empty sub-directory, what is true after this command line:  
`touch new ; mv ./dir/../new ../myhome/old`
- there is a second copy of the file `new` in the file named `old`
  - the command fails because the path `./dir/../new` does not exist
  - the parent directory of `dir` now has a file named `old` in it
  - the command fails because the path `../myhome/old` does not exist
  - the directory `dir` now contains only a file named `old`
50. What is the output of this successful command sequence?  
`cd /tmp ; mkdir foo ; mkdir bar ; pwd`
- `/tmp/foo`
  - `/tmp`
  - `/bar`
  - `/tmp/bar`
  - `/tmp/foo/bar`
51. The `-v` option to the `grep` command does what?
- prints the version number of the `grep` command
  - selects lines that do not contain unprintable characters
  - selects lines that do not contain a match for the supplied pattern
  - turns on the translation of unprintable characters
  - turns off the translation of unprintable characters
52. What can you do to get back (redo) the last command you typed to the `bash` (Linux) shell?
- Type `[CONTROL]-[PREVIOUS]`
  - Type `[ALT]-[F2]`
  - Use the "PageUp" key.
  - Use the "UpArrow" key.
  - Type `[CONTROL]-[BACKSPACE]`
53. What can you do to get back (redo) the last command you typed to the `bash` (Linux) shell?
- Use the "UpArrow" key.
  - Type `[ALT]-[F2]`
  - Type `[CONTROL]-[BACKSPACE]`
  - Use the "BackSpace" key.
  - Type `[CONTROL]-[C]`

54. If my current directory is `/home`, which of these pathnames is equivalent to the pathname `/home/a/b/c`?
- `./home/a/b/c`
  - `../a/b/c`
  - `/a/b/c`
  - `./a/b/c`
  - `../home/b/c`
55. If I am in my home directory named `/home/ian` and `mt` is an empty sub-directory, what is true after this command line:  
`touch ../ian/cat ; cp ./mt/../cat ./mt/../dog`
- there is a second copy of the file named `who` in the file `dog`
  - the command fails because the path `./mt/../cat` does not exist
  - the directory `mt` is still empty
  - the directory `mt` now contains two files
  - the directory `mt` now has a file named `dog` in it
56. If `/bin/bash` is a file name, which pathname always leads to the same file?
- `/bin/bin/./bash`
  - `../bin/./bash`
  - `/bin/./bash`
  - `../bin/bash`
  - `/bin/bash/.`
57. If I am in my home directory named `/home/myhome` and `sub` is an empty sub-directory, what is true after this command line:  
`touch ./fil ; mv sub/../fil ../myhome/cat`
- the command fails because the path `sub/../fil` does not exist
  - there is a second copy of the file `fil` in the file named `cat`
  - the directory `sub` now contains only a file named `cat`
  - the command fails because the path `../myhome/cat` does not exist
  - the directory `sub/..` now has a file named `cat` in it
58. What do you do on Linux/Unix to erase an entire line of typing?
- type `[CTRL-U]`
  - type `[CTRL-C]`
  - select the line with the mouse and use the `DEL` key
  - type `[CTRL-W]`
  - type `[CTRL-D]`
59. Which of these is the most secure password?
- `Easy10!`
  - `secrets`
  - `Canada`
  - `Madonna`
  - `apple15`

60. 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
```
- `foo` and `bar` each have three names (six names total)
 - `foo` and `bar` are two of three names for this file
 - `foo` and `bar` are names for the same file
 - `foo` and `bar` each have two names (four names total)
 - this output is not possible
61. If my current directory is `/home`, which of these pathnames is equivalent to the pathname `/home/a/b/c`?
- `../home/b/c`
 - `../home/a/b/c`
 - `/a/b/c`
 - `../a/b/c`
 - `./home/a/b/c`
62. Who is the owner of file `bar` after you execute this sequence of commands in your home directory:
- ```
ln /etc/passwd x ; ln x y ; cp y z ; ln y bar
```
- the file is owned by `passwd`
  - the file is owned by `home`
  - you own the file `bar`
  - you cannot execute the given commands; no file will be created
  - the file is owned by `root`
63. Which command line displays the contents of the Unix `passwd` file one page at a time?
- `cat less | /etc/passwd`
  - `/etc/passwd cat less`
  - `cat /etc/passwd less`
  - `/etc/passwd | less`
  - `less /etc/passwd`
64. Given this long listing:
- ```
drwxr-xr-x 2048 bin bin 4096 Jan 2 14:22 /dir
```
- How many subdirectories lie immediately under `/dir`?
- 2048
 - 4094
 - 2046
 - there is not enough information shown to answer the question
 - 4096

65. Which of the following is true, given this long directory listing from `ls`:
- ```
755 drwxr-x--x 256 ian user 512 May 30 12:35 dir
```
- The number 256 is the octal permissions of this directory.
  - The number 256 is the inode number of this directory.
  - The number 512 is the count of links (names) this directory has.
  - The number 512 is the size of this directory.
  - The number 755 is the count of links (names) this directory has.
66. Which command shows the name of the current computer:
- `hostname`
  - `who`
  - `w`
  - `comname`
  - `users`
67. Which of the following is true, given this long directory listing:
- ```
drwxr-x--x 71 ian user 4096 May 30 12:35 /dir
```
- The number 71 is the inode number of this directory.
 - The number 4096 is the inode number of this directory.
 - The number 71 is the count of links (names) this directory has.
 - The number 71 is the size of this directory.
 - The number 4096 is the count of links (names) this directory has.
68. If I am in my home directory named `/home/me` and `x` is an empty sub-directory, what is true after this command line:
- ```
touch ./x/fil ; mv x/./fil x/../../../../me/./y
```
- the command fails because the path `x/./fil` does not exist
  - there is a second copy of the file `fil` in the file named `y`
  - the directory `x` now contains only a file named `y`
  - the command fails because the path `x/../../../../me` does not exist
  - the directory `x` is still empty
69. Which of these statements is true?
- Unix commands must be entered in lower-case letters.
  - To delete a word from the shell command line, type `[CONTROL]-[D]`
  - Unix commands can be entered in upper-case or lower-case letters; they are equivalent.
  - To indicate End-of-File (no more input), type `[CONTROL]-[E]`.
  - To erase an entire line of typing, type `[CONTROL]-[E]`.

70. If my current working directory is **/home**, and my home directory is **/home/me**, which of the following commands copies the Unix password file into my home directory under the name **foo**?
- `cp ../../etc/passwd /me/foo`
  - `cp ./me/../../etc/passwd ../home/me/foo`
  - `cp ../etc/passwd ../me/foo`
  - `cp ../home/me/../../etc/passwd ./me/./foo`
  - `cp me/../../etc/passwd me/foo`
71. If you type the command `sleep 60` which key sequence will interrupt it and take you immediately back to the command prompt?
- `[CTRL-L]`
  - `[CTRL-U]`
  - `[CTRL-C]`
  - `[CTRL-R]`
  - `[CTRL-D]`
72. Which command below is the best way to find a line containing a question mark (?) in the file **/etc/passwd**?
- `search '?' /etc/passwd`
  - `grep './?' /etc/passwd`
  - `grep /etc/passwd '?'`
  - `find '?' /etc/passwd`
  - `grep '?' /etc/passwd`
73. What would you see if you typed this command: `cat /users`
- The contents of your directory named **users**
  - The contents of your subdirectory named **users**
  - The contents of the file **users** located in the root directory
  - The contents of the file **users** located in your home directory
  - The contents of the file **users** located in the parent directory
74. What is true about this output from `ls -ild foo bar`?
- ```
816 -rwxr-xr-x 2 root root 3 Jan 24 01:03 foo
816 drwxr-xr-x 2 root root 3 Jan 24 01:03 bar
```
- foo** and **bar** are names for different files
 - this output is not possible
 - foo** and **bar** are two of three names for this file
 - foo** and **bar** each have three names (six names total)
 - foo** and **bar** are names for the same file

75. Which of these statements is true?
- To interrupt a Unix process from the keyboard, type `[CONTROL]-[D]`.
 - To indicate End-of-File (no more input) to a program, type `[CONTROL]-[D]`.
 - To erase an entire line of typing, type `[ALT]-[DELETE]`.
 - Command **apropos** is an exact synonym for command **man**.
 - The **file** command creates a new, empty file in the current directory
76. Who is the owner of file **bar** after you execute this sequence of commands in your home directory:
- ```
ln /etc/passwd foo ; ln foo one
ln one two ; ln two bar
```
- the file is owned by **root**
  - the file is owned by **home**
  - you own the file **bar**
  - the file is owned by **passwd**
  - you cannot execute the given commands; no file will be created
77. If you type the command `cat` which of the following key sequences will send an EOF and take you immediately back to the command prompt?
- `[CTRL-R]`
  - `[CTRL-I]`
  - `[CTRL-C]`
  - `[CTRL-D]`
  - `[CTRL-U]`
78. In a directory that contains only the file **single**, what happens after this command: `mv single double`
- the command fails because "single" is not a directory
  - the command fails because the name "double" does not exist
  - there is only the file named "double" in the directory now
  - an empty file named "double" is created
  - there is a second copy of the file "single" in the file named "double"
79. Which command line below does not show any lines from inside the file **out**?
- `tail out`
  - `sort out`
  - `head out`
  - `more out`
  - `wc out`

80. How many arguments and options are there to the command:  
`ls -al /etc`
- Two arguments, no options.
  - Two arguments, one of which is a single option and the other is a pathname.
  - Two options, no arguments.
  - Two command line arguments, one of which contains two bundled options.
  - A three-letter file name and an `/etc` switch option.
81. How can you ask the **bash** (Linux) shell to complete commands or file names for you?
- Type the first part of the command or file name and press the `[ALT]-[F1]` key.
  - Type the first part of the command or file name and press the `[TAB]` key.
  - Type the first part of the command or file name and press the `[ALT]` key.
  - Type the first part of the command or file name and press the `[CTRL]-[C]` key.
  - Type the first part of the command or file name and press the `[CTRL]-[D]` key.
82. If `/bin/bash` is a file name, which of the following pathnames always leads to the same file?
- `/bin/bash/..`
  - `/bin/../bash`
  - `/../../bin/bash`
  - `./bin/bash`
  - `/bin/bash/.`
83. If I have a directory owned by me named `/a/b/c/d`, which of the following actions would increase its *link count* by exactly one?
- create one subdirectory named `/a/b/c/d`
  - create one file named `/a/b/c/d/e`
  - create one subdirectory named `/a/b/c/d2`
  - create one subdirectory named `/a/b/c/d/e`
  - create one file named `/a/b/c/d2`
84. Which of these commands always returns you to your account home directory?
- `cd`
  - `cd home`
  - `cd /home`
  - `cd /home/..`
  - `cd ..`

85. Which command line would show the inode number of a file?
- `cat -i file`
  - `find -i file`
  - `ls -i file`
  - `cat -l file`
  - `ls -l file`
86. What is the output of this successful command sequence?  
`cd /home/foo ; touch dir ; mkdir bar ; pwd`
- `/home/foo/dir`
  - `/home/dir`
  - `/home/bar`
  - `/home/foo`
  - `/home/foo/bar`
87. What can you do to get back (redo) the last command you typed to the **bash** (Linux) shell?
- Use the "PageUp" key.
  - Type `[CONTROL]-[BACKSPACE]`
  - Type `[CONTROL]-[ALT]-[DEL]`
  - Use the "UpArrow" key.
  - Type `[ALT]-[F2]`
88. What is the link count of directory **d** after this set of successful commands?  
`mkdir d ; touch f ; cd d ; ln ../f x`
- 3
  - 1
  - 2
  - 5
  - 4
89. 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`
- 3
  - 2
  - 4
  - 6
  - 5
90. When doing an `ls -a`, the output pathname that is a double dot (`..`) signifies what?
- The root directory.
  - A hidden file.
  - A file or directory with double links.
  - The parent directory.
  - The current directory.



91. Which of the following is true, given this long directory listing from **ls**:
- ```
755 drwxr-x--x 512 ian user 256 May 30 12:35 dir
```
- The number 256 is the count of links (names) this directory has.
 - The number 755 is the octal permissions of this directory.
 - The number 512 is the count of links (names) this directory has.
 - The number 256 is the inode number of this directory.
 - The number 512 is the size of this directory.
92. If **foo** is a directory that contains only the file **single**, what happens after this command: **mv foo/single foo/double**
- there is only the file named **double** in the directory now
 - there is a second copy of the file **single** in the file named **double**
 - the command fails because the name **double** does not exist
 - the command fails because **single** is not a directory
 - an empty file named **double** is created
93. What is the Unix user name for the Super-User account?
- superuser**
 - administrator**
 - alterego**
 - root**
 - master**
94. If file **foo** occupies two disk blocks, how many disk blocks are in use after this sequence of commands:
- ```
cp foo bar ; ln bar one ; cp one two ; ln one ten
```
- 6 blocks
  - 10 blocks
  - 8 blocks
  - 2 blocks
  - 4 blocks
95. Which command line lists all possible utilities available for sorting files?
- man -k sort**
  - man | grep sort**
  - grep sort /etc/passwd**
  - grep /etc/passwd sort**
  - man sort**
96. What is the link count of file **foo** after this set of successful commands?
- ```
rm foo ; touch foo ; ln foo bar
cp bar x ; ln x y ; ln bar z
```
- 1
 - 4
 - 5
 - 2
 - 3

97. In the output of the command **ls -a**, a dot that begins a name signifies what?
- The parent directory.
 - A name with an unprintable character.
 - A name that is hidden.
 - The current directory.
 - A current file.
98. If I am in my home directory named **/home/ian** and **mt** is an empty sub-directory, what is true after this command line:
- ```
touch ../ian/cat ; cp ./mt/./cat ./mt/./dog
```
- the directory **mt** now contains two files
  - the directory **mt** now has a file named **dog** in it
  - there is a second copy of the file named **who** in the file **dog**
  - the command fails because the path **./mt/./cat** does not exist
  - the directory **mt** is still empty
99. If my current working directory is **/home**, and my home directory is **/home/xx**, which of the of the following commands copies the Unix password file into my home directory under the name **foo**?
- cp ../etc/passwd ../xx/foo**
  - cp ../home/xx/./etc/passwd ./xx/./foo**
  - cp xx/.../etc/passwd xx/foo**
  - cp ../.../etc/passwd /xx/foo**
  - cp xx/./etc/passwd ../home/xx/foo**
100. Which Unix command sequence deletes a directory and everything inside it?
- rm -all dir**
  - rmdir -r dir**
  - rm -r dir**
  - deltree -all dir**
  - rmdir -all dir**
101. What is the output of this successful command sequence?
- ```
cd /home/foo ; touch dir ; mkdir bar ; pwd
```
- /home/foo/bar**
 - /home/foo/dir**
 - /bar**
 - /home/foo**
 - /home/foo/dir/bar**
102. What command can you use to remove a directory that isn't empty?
- rm -r dir**
 - del -r dir**
 - deldir -r dir**
 - rmdir -r dir**
 - mv -r dir**

103. Which of the following is true, given this long directory listing from **ls**:
- ```
drwxr-x--x 123 ian user 456 May 30 12:35 dir
```
- The number 123 is the inode number of this directory.
  - The number 456 is the size of this directory.
  - The number 123 is the size of this directory.
  - The number 123 is the octal permissions of this directory.
  - The number 456 is the count of links (names) this directory has.
104. If you type the command **echo 'missing quote** which of the following key sequences will interrupt it and take you immediately back to the command prompt?
- [CTRL-U]**
  - [CTRL-D]**
  - [CTRL-C]**
  - [CTRL-L]**
  - [CTRL-R]**
105. Which of the following is true, given this long directory listing:
- ```
drwxr-x--x 71 ian user 512 May 30 12:35 dir
```
- The number 71 is the inode number of this directory.
 - The number 71 is the size of this directory.
 - The number 512 is the inode number of this directory.
 - The number 512 is the count of links (names) this directory has.
 - The number 71 is the count of links (names) this directory has.
106. How do I search for the string **xyz** in the text display output from the **man** command?
- /xyz**
 - search xyz**
 - @xyz**
 - find xyz**
 - use the mouse to select "Search" in the menu
107. What is the link count of directory **d** after this set of successful commands?
- ```
mkdir d ; cd d ; touch a ; mkdir b c d
```
- 3
  - 6
  - 4
  - 5
  - 2
108. If I have a directory owned by me named **/a/b/c/7**, which of the following actions would increase its *link count* by exactly one?
- create one subdirectory named **/a/b/c/7/d2**
  - create one file named **/a/b/c/7de**
  - create one subdirectory named **/a/b/c/7e**
  - create one file named **/a/b/c/7/d2**
  - create one subdirectory named **/a/b/c/d/e**

109. To shut down your Fedora system in an orderly fashion:
- type the three key **[CONTROL]-[ALT]-[F1]**
  - type the three key **[CONTROL]-[ALT]-[DEL]**
  - select "System|Shut down"
  - logout from each terminal and the machine will shut down
  - select VMware "VM|Stop this virtual machine"
110. Which command line below does not show any lines from inside the file **pig**?
- tail pig**
  - ls pig**
  - head pig**
  - less pig**
  - more pig**
111. How many arguments and options are there to the command:
- ```
ls -li foobar
```
- Two options, no arguments.
 - Two arguments, no options.
 - Two arguments, one of which is a single option and the other is a pathname.
 - One argument, no options.
 - Two command line arguments, one of which contains two bundled options.
112. Which command displays the contents of the Unix **passwd** file one page at a time?
- more /etc/passwd**
 - head /etc/passwd**
 - page /etc/passwd**
 - info /etc/passwd**
 - cat /etc/passwd**
113. What is true about this output from **ls -il foo bar**
- ```
72 -rwxrwxrwx 2 bin bin 3 Oct 30 09:23 foo
72 -r--r--r-- 2 bin bin 3 Oct 30 09:23 bar
```
- foo** and **bar** are names for different files
  - foo** and **bar** are names for the same file
  - foo** and **bar** each have two names (four names total)
  - foo** and **bar** are two of three names for this file
  - this output is not possible

114. What is true about this output from `ls -ild foo bar`
- ```
96 -rwxr-xr-x 2 root root 3 Jan 24 01:03 foo
96 -rwxr-xr-x 3 root root 3 Jan 24 01:03 bar
```
- `foo` and `bar` are names for the same file
 - `foo` and `bar` are names for different files
 - this output is not possible
 - `foo` and `bar` each have three names (six names total)
 - `foo` and `bar` are two of five names for this file
115. How many arguments and options are there to the command:
- ```
ls -ls /cat
```
- Two arguments, no options.
  - Two arguments, one of which is a single option and the other is a pathname.
  - Two command line arguments, one of which contains two bundled options.
  - Two options, no arguments.
  - A three-letter file name and a `/cat` switch option argument.
116. If my current working directory is `/home`, and my home directory is `/home/me`, which of the following commands copies the Unix password file into my home directory under the name `foo`?
- `cp ../home/me/../../etc/passwd ../me/./foo`
  - `cp ../etc/passwd ../me/foo`
  - `cp ../me/../../etc/passwd ../home/me/foo`
  - `cp ../etc/passwd ../me/foo`
  - `cp ../../etc/passwd /me/foo`
117. 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
```
- `foo` and `bar` are names for the same file
 - this output is not possible
 - `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)

118. What would you see if you typed this command: `cat /users`
- The contents of the file `users` located in the root directory
 - The contents of your directory named `users`
 - The contents of the file `users` located in your home directory
 - The contents of the file `users` located in the parent directory
 - The contents of your subdirectory named `users`
119. What is true about this output from `ls -il foo bar`
- ```
871 -r----- 2 bin bin 3 Nov 12 12:55 foo
871 -r----- 2 bin bin 3 Nov 12 12:55 bar
```
- this output is not possible
  - `foo` and `bar` each have three names (six names total)
  - `foo` and `bar` are names for the same file
  - `foo` and `bar` are two of three names for this file
  - `foo` and `bar` are names for different files
120. 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 ten
```
- 4 blocks
 - 1 block
 - 5 blocks
 - 3 blocks
 - 2 blocks
121. If I am in my home directory named `/home/idallen` and `empty` is an empty sub-directory, what is true after this command line:
- ```
touch ./pig ; mv ./empty/./pig ../idallen/cow
```
- the directory `empty` now contains only a file named `cow`
  - the directory `empty/..` now has a file named `cow` in it
  - the command fails because path `../idallen/cow` does not exist
  - there is a second copy of the file `pig` in the file named `cow`
  - the command fails because path `./empty/./pig` does not exist
122. How many arguments and options are there to the command:
- ```
ls -lid /p
```
- Three arguments, one of which contains options and one is a pathname.
 - Two arguments: A file name starting with a dash and a `/p` switch option argument.
 - Two command line arguments, one of which contains three options.
 - Two arguments, one of which is a single option name and the other is a pathname.
 - Two arguments, neither of which is an option.

123. Which command line displays the contents of the Unix **passwd** file one page at a time?
- `cat less | /etc/passwd`
 - `less | /etc/passwd`
 - `less /etc/passwd`
 - `/etc/passwd | less`
 - `cat /etc/passwd | vim`
124. What do you do on Linux/Unix to erase an entire line of typing?
- type **[CTRL-W]**
 - select the line with the mouse and use the **DEL** key
 - select the line with the mouse and use the **BACKSPACE** key
 - type **[CTRL-D]**
 - type **[CTRL-U]**
125. Which command line below does not show any lines from inside the file **bat**?
- `more bat`
 - `less bat`
 - `head bat`
 - `ls bat`
 - `tail bat`
126. If I have a directory owned by me named **/x/y/z**, which of the following actions would increase its *link count* by exactly one?
- create one subdirectory named **/x/y/z/x**
 - create one file named **/x/y/z/x**
 - create one subdirectory named **/x/y/z2**
 - create one subdirectory named **/x/y/z/.**
 - create one file named **/x/y/z2**
127. If **/etc/passwd** is a file name, which of the following pathnames always leads to the same file?
- `./../etc/./passwd`
 - `/etc/./../passwd`
 - `/etc/passwd/./...`
 - `/etc/passwd/./.`
 - `./../etc/passwd`
128. Which command line lists all possible utilities available for compiling programs?
- `find compile`
 - `grep compile /etc/`
 - `apropos compile`
 - `locate compile`
 - `man compile`

129. What is the link count of file **foo** after this set of successful commands?
- ```
rm foo ; touch foo ; ln foo bar
cp bar x ; ln x y ; ln bar z ; ln z a
```
- 1
  - 4
  - 3
  - 2
  - 5
130. Which command line below does not show any lines from inside the file **out**?
- `cat out`
  - `locate out`
  - `head out`
  - `sort out`
  - `tail out`
131. What does the **-v** option to the **grep** command do?
- prints the version number of the **grep** command
  - selects lines that do not contain a match for the supplied pattern
  - selects lines that do not contain unprintable characters
  - turns off the translation of unprintable characters
  - turns on the translation of unprintable characters
132. When doing an **ls -a**, the output pathname that is a double dot (**..**) signifies what?
- A hidden file.
  - The root directory.
  - The current directory.
  - The parent directory.
  - A pathname with double links.
133. In the output of the command **ls -a**, the one-character name **.** signifies what?
- A name with an unprintable character.
  - A current file.
  - The parent directory.
  - A name that is hidden.
  - The current directory.
134. Given this long listing:
- ```
drwxr-xr-x 448 me me 296 Dec 4 9:12 /dir
```
- How many subdirectories lie immediately under **/dir**?
- 448
 - there is not enough information shown to answer the question
 - 296
 - 446
 - 294

135. Which of these statements is true?
- To erase an entire line of typing, type **[ALT]-[DELETE]**.
 - The **file** command creates a new, empty file in the current directory
 - To indicate End-of-File (no more input) to a program, type **[CONTROL]-[D]**.
 - To interrupt a Unix process from the keyboard, type **[CONTROL]-[D]**.
 - Command **apropos** is an exact synonym for command **man**.
136. Which statement is true, given this long directory listing from **ls**:
- ```
drwxr-x--x 256 ian user 512 May 30 12:35 dir
```
- The number 512 is the count of links (names) this directory has.
  - The number 256 is the size of this directory.
  - The number 256 is the octal permissions of this directory.
  - The number 512 is the size of this directory.
  - The number 256 is the inode number of this directory.
137. Which command line below never shows any lines from inside the file **cow**?
- tail cow**
  - grep pattern cow**
  - head cow**
  - wc cow**
  - sort cow**
138. How many arguments and options are there to the command:
- ```
cal -jy 2001
```
- A single numeric option and a three-letter file name.
 - Two command line arguments, one of which contains two options.
 - Two arguments, one of which is a single option and the other is a pathname.
 - Two arguments, no options.
 - Two options, no arguments.
139. If **foo** is a sub-directory that contains only the file **pig**, what happens after this command: **mv foo/pig foo/././dog**
- the directory **foo** now contains only a file named **dog**
 - the directory **foo** is now empty
 - the command fails because the name **foo/././dog** does not exist
 - there is a second copy of the file **pig** in the file named **dog**
 - the command fails because the name **dog** does not exist

140. What is the result of this exact command line:
- ```
echo /etc/passwd hello
```
- the text **"/etc/passwd"** and **"hello"** will be displayed
  - all the files under **"/etc/passwd"** with the name **"hello"** will be displayed
  - a list of file names matching **"/etc/passwd"** and **"hello"** will be displayed
  - file **"/etc/passwd"** will be copied to **"hello"**; the names will be displayed as well
  - the contents of the files **"/etc/passwd"** and **"hello"** will be displayed
141. In the output of the command **ls -i -a**, a dot that *begins* a pathname signifies what?
- A name with an unprintable character.
  - An inode (index) numbered file.
  - The current directory.
  - The parent directory.
  - A name that is hidden.
142. Which of these statements is true?
- To indicate End-of-File (no more input), type **[CTRL]-[C]**.
  - To delete a word from the shell command line, type **[CONTROL]-[D]**
  - To erase an entire line of typing, type **[CTRL]-[D]**.
  - Unix commands can be entered in upper-case or lower-case letters; they are equivalent.
  - Unix commands must be entered in lower-case letters.
143. What is true about this output from **ls -il foo bar**?
- ```
816 -rw-r--r-- 2 root root 3 Jan 24 01:03 foo
817 -rw-r--r-- 2 root root 3 Jan 24 01:03 bar
```
- foo** and **bar** are two of three names for this file
 - this output is not possible
 - foo** and **bar** are names for different files
 - foo** and **bar** are names for the same file
 - foo** and **bar** each have three names (six names total)
144. What is the output of this successful command sequence?
- ```
cd /home/dir ; mkdir one ; mkdir two ; pwd
```
- /two**
  - /home/dir/two**
  - /home/dir**
  - /home/dir/one**
  - /home/dir/one/two**

145. Which command removes adjacent duplicate lines from a file?

- a. **unique**
- b. **duplicate**
- c. **dupl**
- d. **dup**
- e. **uniq**

146. If **/etc/passwd** is a file name, which of the following pathnames always leads to the same file?

- a. **/etc/passwd/../../**
- b. **./etc/passwd**
- c. **/../etc/./passwd**
- d. **/etc/../../passwd**
- e. **/etc/passwd/.**

147. If you type the command **cat** which of the following key sequences will send an EOF and take you immediately back to the command prompt?

- a. **[CTRL-C]**
- b. **[CTRL-U]**
- c. **[CTRL-R]**
- d. **[CTRL-D]**
- e. **[CTRL-L]**

*This page intentionally left blank.*