

PRINT Name: \_\_\_\_\_ LAB Section:

**One-Answer Multiple Choice 229 Questions**

**Weight 10%**

- ☞ 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.
- ☞ The answer to the questions below about reading/doing all these test instructions is: **Jes**

191. Answer **191** is
192. Answer **192** is
193. Answer **193** is
194. Answer **194** is
195. Answer **195** is
196. Answer **196** is

Your **Test Version** is:

**C C C A B D**

Fill in the bubbles for the above six letters as six answers **191** through **196** on the back side of the Scantron form, in the lower-right-most answer column.

1. **Did you read all the words of the test instructions on page one?**
  - a. **Sim** (Yes - Portuguese)
  - b. **Tak** (Yes - Polish)
  - c. **Igen** (Yes - Hungarian)
  - d. **Jes** (Yes - Esperanto)
  - e. **Taip** (Yes - Lithuanian)
2. **My three-digit Lab Section number is:**
  - a. The timetable section number of my weekly 2-hour lab period.
  - b. The Test Version number printed in the top left corner.
  - c. My lab room number: **B384, A219, B132, B185, P213**
  - d. My lecture section number, e.g. **010** or **020**.
  - e. My lecture room number, e.g. **T119, C346**
3. In the output of the command **ls -a**, the one-character name **.** signifies what?
  - a. A name with an unprintable character.
  - b. The ROOT directory.
  - c. A current file.
  - d. The current directory.
  - e. The parent directory.
4. What is the *current directory*?
  - a. The directory named **..** (dot dot)
  - b. The directory that your shell (or any Unix process) is in now
  - c. The directory named **/current**
  - d. The directory into which you are placed when you first log in
  - e. This is where "root" goes when "root" logs in to the system

5. In an empty directory, what is the output on your screen after this command line:
 

```
date >.foo >.bar ; ls *
```

  - a. no output
  - b. **\***
  - c. **.foo .bar**
  - d. an error message from **ls** saying **\*** does not exist
  - e. **. .. .foo .bar**
6. If a shell GLOB pattern fails to match anything, what happens by default? The shell:
  - a. gives a warning message but continues
  - b. passes the pattern unchanged to the command
  - c. returns the closest match to the pattern
  - d. gives an error message and does not execute
  - e. removes the pattern and passes nothing
7. Which command line below outputs only lines 11-15 of the Unix password file?
  - a. **head -n 10 /etc/passwd | tail -n 15 /etc/passwd**
  - b. **tail -n 10 /etc/passwd | head -n 15 /etc/passwd**
  - c. **head -n 15 /etc/passwd | tail -n 5 /etc/passwd**
  - d. **head -n 15 /etc/passwd | tail -n 5**
  - e. **tail -n 15 /etc/passwd | head -n 10**
8. Which pathname almost always leads to the same file named: **/etc/shadow**
  - a. **/etc/../../../../shadow**
  - b. **/etc/shadow/../../../../**
  - c. **././etc/shadow**
  - d. **/etc/shadow/./.**
  - e. **/../../../../etc/./shadow**
9. To prevent disconnections when using the Windows version of **PuTTY**, you should make this configuration change:
  - a. use your student number as your password
  - b. use your ACSIS password as your password
  - c. set the seconds between keepalives to 55
  - d. log in using your Blackboard userid
  - e. your password will not echo on your screen as you type
10. In an empty directory, how many words are in file **cow** after this command line:
 

```
touch dog dog cat ; ls >cow
```

  - a. **0**
  - b. **4**
  - c. **1**
  - d. **2**
  - e. **3**
11. What is the result of this exact command line: **ls /foo bar**
  - a. file **/foo** will be copied to **bar**
  - b. the names of the pathnames **/foo** and **bar** will be displayed
  - c. all the files under directory **/foo** with the name **bar** will be displayed
  - d. the contents of the files **/foo** and **bar** will be displayed
  - e. the two text strings **/foo** and **bar** will be displayed

12. If `/bin/bash` is a file name, which pathname always leads to the same file?
- `/bin/bash/`
  - `../bin/./bash`
  - `/bin/bin/./bash`
  - `.././bin/bash`
  - `/bin/./bash`
13. 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`
  - no output
  - `mt`
  - `ls: nosuchfile: No such file or directory`
  - `bash: 2>/dev/null: command not found`
14. 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`
  - `../home/b/c`
  - `./a/b/c`
  - `../a/b/c`
15. 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 file named `cat` is now renamed to `dog`
  - the command fails because the path `./mt/./cat` does not exist
  - the directory `mt` now contains two files
  - the directory `mt` now has a file named `dog` in it
  - the directory `mt` is still empty
16. What is the output on your screen after this command line:
- ```
echo hi >ls ; cat ls > wc
```
- no output
  - `hi`
  - `ls`
  - `1 1 3`
  - `1 1 2`
17. What command shows all the lines in file `cow` that contain the string `pig`?
- `grep pig <cow`
  - `cat cow > grep pig`
  - `grep cat cow pig`
  - `grep pig >cow`
  - `grep cow pig`
18. If directory `dir` contains these three four-character file names: `.123`, `.124`, `.???`, then what is the output on your screen of this command line:
- ```
echo dir/????
```
- `dir/????`
  - `dir/.123 dir/.124 dir/.???`
  - `echo: dir/????: No such file or directory`
  - no output
  - `dir/.123 dir/.124`
19. How many words are in file `out` after this command line:
- ```
echo one >two >three >out
```
- 2
  - 0
  - 1
  - 4
  - 3

20. If you type the command `sleep 60`, which `CTRL` key will **interrupt** it and take you back to the command prompt?
- `^R`
  - `^I`
  - `^D`
  - `^C`
  - `^U`
21. 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`?
- `cp ../../etc/passwd /me/foo`
  - `cp ../etc/passwd ../me/foo`
  - `cp me/../../etc/passwd me/foo`
  - `cp ./me/./etc/passwd ../home/me/foo`
  - `cp ../home/me/./etc/passwd ./me/./foo`
22. If I am in directory `/home/me` and `mt` is an empty sub-directory, what is true after this command line: `touch ./foo ; mv ./mt/./foo ../me/bar`
- the directory `mt` now contains only a file named `bar`
  - there is a second copy of the file `foo` in the file named `bar`
  - the directory `mt/..` now contains a file named `bar`
  - the command fails because path `../me/bar` does not exist
  - the command fails because path `./mt/./foo` does not exist
23. What is the possible output on your screen of this command line:
- ```
echo wc >date ; sort date >date ; cat date
```
- `wc`
  - `1 6 28 date`
  - no output
  - `Fri Mar 16 12:00:00 EST 2012`
  - `1 6 29 date`
24. If `foo` is a sub-directory that contains only the file `bar`, what happens after this command: `mv foo/./bar foo/./me`
- the command fails because the name `foo/./bar` does not exist
  - the command fails because the name `me` does not exist
  - the directory `foo` is now empty
  - there is a second copy of the file `bar` in the file named `me`
  - the directory `foo` now contains only a file named `me`
25. Which of the following commands will leave `file1` non-empty?
- `cat file1 > file1`
  - `wc file1 > file1`
  - `tail file1 > file1`
  - `head file1 > file1`
  - `sort file1 > file1`
26. If file `/a` contains 30 lines, and file `/b` contains 50 lines, then how many lines are in file `/c` after this command line:
- ```
cat /a /b >/c ; sort /c >/c ; sort /c /a /b >/c
```
- 160
  - 50
  - 30
  - 80
  - 0

27. In the output of the command `ls -a`, a dot (period) that *begins* a name signifies what?
- A name that is hidden.
  - The parent directory.
  - A current file.
  - A name with an unprintable character.
  - The current directory.
28. Which command below is the best way to find a line containing an asterisk (\*) in the file named `foo`?
- `fgrep ./ * foo`
  - `fgrep '*' foo`
  - `fgrep * foo`
  - `fgrep foo "*"`
  - `fgrep foo [*]`
29. Which command line below does *not* show any lines from inside the file `out`?
- `wc out`
  - `sort out`
  - `tail out`
  - `head out`
  - `more out`
30. If `pig` is a sub-directory that contains only the file `dog`, what happens after this command: `mv pig/dog pig/./cat`
- the directory `pig` now contains only a file named `cat`
  - the command fails because the name `cat` does not exist
  - the directory `pig` is now empty
  - the command fails because the name `pig/./cat` does not exist
  - there is a second copy of the file `dog` in the file named `cat`
31. Which of the following statements is true about this command line:  
`<dir/c cat dir/d`
- The command `cat` sees two arguments.
  - The command `dir/c` sees two arguments.
  - The command `dir/c` sees only one argument
  - The command is always invalid.
  - The command `cat` sees only one argument.
32. Which command below is the best way to find a line containing a question mark (?) in the file `/etc/passwd`?
- `find '?' /etc/passwd`
  - `search '?' /etc/passwd`
  - `grep /etc/passwd '?'`
  - `grep '?' /etc/passwd`
  - `grep './?' /etc/passwd`
33. If `foo` is a sub-directory that contains only the file `bar`, what happens after this command: `mv foo/me foo/bar`
- the command fails because the name `me` does not exist
  - there is a second copy of the file `bar` in the file named `me`
  - there is only the file named `me` in the directory now
  - the command fails because `bar` is not a directory
  - an empty file named `me` is created

34. If file `twenty` contains twenty lines, and file `thirty` contains thirty lines then how many lines are output on your screen by this command line:  
`tail twenty | cat thirty`
- 0
  - 30
  - 20
  - 40
  - 50
35. What command can you use to delete a directory that isn't empty?
- `rmdir -r dir`
  - `deldir -r dir`
  - `del -r dir`
  - `rm -r dir`
  - `deltree -r dir`
36. If file `foo` 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 foo foo | tail -n 5 | head -n 1`
- 1
  - 5 5
  - 1 1
  - 7
  - 9
37. If `/bin/bash` is a file name, which pathname always leads to the same file?
- `./bin/bash`
  - `../../bin/bash`
  - `/bin/./bash`
  - `/bin/bash/.`
  - `/bin/bash/..`
38. If file `/a` contains 30 lines, and file `/b` contains 50 lines, then how many lines are output on your screen by this command line: `cat /a | sort /b`
- 0
  - 30
  - 20
  - 50
  - 80
39. Which command line lists all possible utilities available for compiling programs?
- `find compile`
  - `man compile`
  - `grep compile /etc/`
  - `apropos compile`
  - `locate compile`
40. The command that creates a directory and all parent directories is:
- `rm -r a/b/c`
  - `mkdir -r a/b/c`
  - `rmdir -r a/b/c`
  - `mkdir -p a/b/c`
  - `touch a/b/c`
41. Which of these command line will make `bar` contain all of the content of `f1` followed by all of the content of `f2`?
- `wc f1 f2 >bar`
  - `cat f1 f2 >bar`
  - `cp f1 f2 >bar`
  - `mv f1 f2 >bar`
  - `echo f1 f2 >bar`
42. 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`
- 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
  - there is a second copy of the file `new` in the file named `old`
  - the directory `dir` now contains only a file named `old`

43. How many lines are in file **out** after this command line:  
`echo hi >dog >out >cat`  
 a. 2            b. 1            c. 4            d. 3            e. 0
44. What can you do to get back (redo) the last command you typed?  
 a. Use the "PageUp" key.            b. Use the "UpArrow" key.  
 c. Type [CTRL]-[BACKSPACE]        d. Type [ALT]-[F2]  
 e. Type [CTRL]-[ALT]-[UP]
45. If file **foo** contains 99 lines, each of which is the two-digit line number of the line in the file (01 through 99), what is the output on your screen of this command:  
`sort foo foo | tail -n 4 | head -n 1`  
 a. 96            b. 96 96            c. 98  
 d. 04 04            e. 01 01
46. The basic purpose of a shell is:  
 a. to format hard drives  
 b. to find and run commands  
 c. to program system administration backup procedures  
 d. to search for strings inside text files  
 e. to expand pathnames
47. To make the **bash** shell complete commands or file names, you type the first part of the command or file name and then press this key:  
 a. [CTRL]-[D]            b. [ALT]            c. [TAB]  
 d. [ALT]-[F1]            e. [CTRL]-[C]
48. 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. 5            b. 0            c. 1            d. 2            e. 4
49. If I am in directory **/home/me** and **mt** is an empty sub-directory, what is true after this command line:  
`touch ./mt/foo ; mv mt/./foo mt/./../me/./y`  
 a. the directory **mt** now contains only a file named **y**  
 b. the directory **mt** is still empty  
 c. there is a second copy of the file **foo** in the file named **y**  
 d. the command fails because the path **mt/./foo** does not exist  
 e. the command fails because the path **mt/./../me** does not exist
50. If file **/a** contains 3 lines, and file **/b** contains 5 lines, then how many lines are in file **/c** after this command line:  
`cat /a /b >/c ; sort /c >/c ; sort /c /a /b >/c`  
 a. 16            b. 5            c. 0            d. 8            e. 3

51. Which of these statements is true?  
 a. Unix commands must be entered in lower-case letters.  
 b. Unix commands can be entered in upper-case or lower-case letters; they are equivalent.  
 c. To indicate End-of-File (no more input), type [CTRL]-[C].  
 d. To erase an entire line of typing, type [CTRL]-[D].  
 e. To delete a word from the shell command line, type [CTRL]-[D]
52. What is the output of this command line in an empty directory:  
`touch x .a .ab .cde .fghi ; echo .??*`  
 a. an error message from **echo** saying `.??*` does not exist  
 b. `.cde .fghi`  
 c. `.ab .cde .fghi`  
 d. `.??*`  
 e. `. . . .a .ab .cde .fghi`
53. What command can you use to delete an empty directory?  
 a. **rmdir**            b. **deldir**            c. **delete**  
 d. **erase**            e. **mvdir**
54. What is the result of this exact command line: `cat /foo bar`  
 a. the two text strings **/foo** and **bar** will be displayed  
 b. the contents of the files **/foo** and **bar** will be displayed  
 c. the names of the pathnames **/foo** and **bar** will be displayed  
 d. file **/foo** will be copied to **bar**  
 e. all the files under directory **/foo** with the name **bar** will be displayed
55. In an empty directory, how many lines are in file **foo** after this command line:  
`ls nosuchfile . . . 2>foo`  
 a. 4            b. 0            c. 2            d. 1            e. 3
56. If my current directory is **/bin**, which of these pathnames is equivalent to the file name **/bin/ls**?  
 a. `./bin/ls`            b. `../bin/ls`            c. `../bin/ls/`  
 d. `/root/bin/ls`            e. `ls/`
57. If file **foo** 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 foo foo | tail -n 2 | head -n 1`  
 a. 2 2            b. 8            c. 9            d. 1            e. 8 8
58. 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`

59. If **cow** is a sub-directory that contains only the file **dog**, what happens after this command: **mv cow/dog cow/././cat**
- the command fails because the name **cow/././cat** does not exist
  - there is a second copy of the file **dog** in the file named **cat**
  - the directory **cow** is now empty
  - the directory **cow** now contains only a file named **cat**
  - the command fails because the name **cat** does not exist
60. If my current directory is **/etc**, which of these pathnames is equivalent to the pathname **/etc/x/y**?
- ./etc/y**
  - ./etc/x/y**
  - /x/y**
  - ./etc/x/y**
  - ./x/y**
61. What is the output of this command line in an empty directory:  
**touch 1 .1 23 .23 456 ; echo [12]\***
- 1 23**
  - 1 .1 23 .23**
  - an error message from **echo** saying **[ab]\*** does not exist
  - 1 .1 23 .23 456**
  - [12]\***
62. 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 **^F** (CTRL-F), then **nongraphic**
  - type **man ls** at the shell, then **/nongraphic**
  - type **man -k nongraphic** at the shell
  - type **man nongraphic | grep ls** at the shell
63. In an empty directory, how many words are in file **out** after this command line:  
**touch a ; ls >out**
- 0**
  - 1**
  - 4**
  - 3**
  - 2**
64. The output of the **tree** command is:
- the tree of files under the ROOT directory
  - the tree of files under your HOME directory
  - a recursive list of users logged in to the system
  - the tree of users logged in to the system
  - an indented, recursive list of directories and their contents
65. In an empty directory, what is the output on your screen after this command line:  
**echo hi >a ; ls >wc -l**
- 2**
  - 1**
  - no output
  - a**
  - 0**
66. How many lines are in the file **bar** after this command line:  
**echo hi >x ; echo ho >>x ; cat x >bar**
- 0**
  - 4**
  - 6**
  - 2**
  - 1**

67. How many lines are in the file **bar** after this command line:  
**echo hi >x ; echo ho >>x ; cat x x >bar**
- 2**
  - 1**
  - 6**
  - 0**
  - 4**
68. If I am in directory **/home/me** and **mt** is an empty sub-directory, what is true after this command line: **touch ./foo ; mv mt/./foo mt/./bar**
- the command fails because the path **mt/./foo** does not exist
  - the directory **./me** now contains a file named **bar**
  - there is a second copy of the file **foo** in the file named **bar**
  - the command fails because the path **mt/./bar** does not exist
  - the directory **mt** now contains only a file named **bar**
69. How many lines are in the file **out** after this command line:  
**date >f ; ls f >>f ; cat f f >out**
- 0**
  - 2**
  - 6**
  - 4**
  - 1**
70. What is the output of this command line in an empty directory: **echo \***
- .**
  - \***
  - .**
  - no output
  - an error message from **echo** saying **\*** does not exist
71. If you type the command **cat**, which **CTRL** key will send an **EOF** and take you back to the command prompt?
- ^U**
  - ^R**
  - ^E**
  - ^C**
  - ^D**
72. In a directory containing one file named **dog**, what is the output on your screen after this command line: **1>/dev/null ls \***
- bash: 1>/dev/null: command not found**
  - \***
  - dog**
  - ls: \*: No such file or directory**
  - no output
73. Which of the command lines below can generate a non-empty file?
- grep 'foo' foo >foo**
  - cat foo >foo**
  - tail foo >foo**
  - ls foo >foo**
  - sort foo >foo**
74. In a manual page **SYNOPSIS** section, square brackets (**[]**) mean:
- something that is optional
  - an arithmetic expression
  - no special meaning
  - something that is repeated
  - a GLOB pattern matching a list
75. If my current directory is **/lib**, which of these pathnames is equivalent to the pathname **/lib/x/y**?
- ./lib/y**
  - ./lib/x/y**
  - ./lib/x/y**
  - /x/y**
  - ./x/y**

76. What is the output of this command line in an empty directory:  
`touch 1 2 3 .a .b .c ; echo .??*`
- an error message from `echo` saying `.??*` does not exist
  - `... 1 2 3 .a .b .c`
  - `... .a .b .c`
  - `.a .b .c`
  - `.??*`
77. What is the output of this command line in an empty directory:  
`touch .a .b .c ; echo .*`
- `... .a .b .c`
  - `.a .b .c`
  - no output
  - `.*`
  - an error message from `echo` saying `.*` does not exist
78. If my current directory is `/etc`, which of these pathnames is equivalent to the file name `/etc/passwd`?
- `../passwd`
  - `./etc/passwd`
  - `./passwd`
  - `../etc/passwd/`
  - `/passwd`
79. What is the output on your screen after these command lines:  
`echo 1 >x ; cp x y ; echo 2 >>y`  
`sort x >y ; cat y`
- 1
  - 1 followed by 2
  - no output
  - 2
  - 2 followed by 1
80. 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 `[CTRL]-[D]` 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 `[ALT]-[F1]` key.
81. In a directory that contains only the file `foo`, what happens after this command:  
`cp foo bar`
- the command fails because `bar` is not a directory
  - the command fails because the name `bar` does not exist
  - an empty file named `bar` is created
  - there is only the file named `bar` in the directory now
  - there is a copy of the file named `foo` in the file named `bar`

82. In an empty directory, what is the output on your screen of this command line:  
`echo hi >foo >bar ; cat foo`
- `hi >foo`
  - `hi`
  - no output
  - `cat: foo: No such file or directory`
  - `hi >foo >bar`
83. If file `/a` contains 20 lines, and file `/b` contains 30 lines, then how many lines are in file `/c` after this command line:  
`sort /a /b >/c ; cat /a >>/b ; sort /c /b /a >/c`
- 70
  - 80
  - 120
  - 50
  - 0
84. How many arguments does the shell pass to this `echo` command:  
`echo one two three >four five`
- 3
  - 2
  - 4
  - 5
  - 6
85. If I am in directory `/home/me` and `mt` is an empty sub-directory, what is true after this command line: `touch foo ; mv ./mt/./foo ../me/bar`
- the directory `mt` now contains only a file named `bar`
  - the command fails because the path `./mt/./foo` does not exist
  - the command fails because the path `../me/bar` does not exist
  - the parent directory of `mt` now contains a file named `bar`
  - there is a second copy of the file `foo` in the file named `bar`
86. In an empty directory, how many words are in file `out` after this command line:  
`echo hi >a ; ls >out`
- 3
  - 4
  - 1
  - 2
  - 0
87. If `foo` is a sub-directory that contains only the file `bar`, what happens after this command: `mv foo/bar foo/moo`
- an empty file named `moo` is created
  - there is a second copy of the file `bar` in the file named `moo`
  - there is only the file named `moo` in the directory now
  - the command fails because the name `moo` does not exist
  - the command fails because `bar` is not a directory
88. Given the pathname `a/b/c`, the *basename* of this pathname is:
- `b/c`
  - `a/b`
  - `b`
  - `c`
  - `a`
89. If file `twenty` contains twenty lines, and file `thirty` contains thirty lines, then how many lines are output on your screen by this command line:  
`tail thirty | cat twenty`
- 0
  - 30
  - 20
  - 50
  - 21

90. If my current directory is `/home`, and my HOME directory is `/home/me`, which command copies the 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 me/../../etc/passwd me/foo`
91. What is the output on your screen of this command line:  
`echo bat > pig ; echo one | tail pig`
- `one`
  - `one` followed by `bat`
  - `bat` followed by `one`
  - an error message
  - `bat`
92. If `foo` is a sub-directory that contains only the file `bar`, what happens after this command: `mv ./foo/bar foo/./me`
- the directory `foo` now contains only a file named `me`
  - the directory `foo` is now empty
  - there is a second copy of the file `bar` in the file named `me`
  - the command fails because the name `./foo/bar` does not exist
  - the command fails because the name `me` does not exist
93. In a directory that contains only the file `foo`, what happens after this command:  
`mv foo bar`
- an empty file named `bar` is created
  - the command fails because `bar` is not a directory
  - there is only the file named `bar` in the directory now
  - the command fails because the name `bar` does not exist
  - there is a copy of the file named `foo` in the file named `bar`
94. If `/bin/bash` is a file name, which pathname always leads to the same file?
- `./bin/./bash`
  - `./bin/bash`
  - `/bin/bin/./bash`
  - `/bin/./bash`
  - `/bin/bash/.`
95. In an empty directory, how many arguments are passed to the `wc` command in this command line: `date >o1 ; touch a1 b2 out >o1 ; wc o*`
- 3
  - 2
  - 1
  - 4
  - 5
96. If directory `cow` contains only these four three-character file names: `.AA`, `.A1`, `.BB`, `.B.`, then what is the output on your screen of this command line:  
`echo cow/*`
- `cow/.B.`
  - `cow/.AA cow/.A1 cow/.BB cow/.B.`
  - `cow/*`
  - `cow/.AA cow/.A1 cow/.BB`
  - no output

97. In which section of the manual do you find super-user and admin commands?
- 4
  - 3
  - 8
  - 1
  - 2
98. If file `/a` contains 40 lines, and file `/b` contains 60 lines, then how many lines are output on your screen by this command line:  
`sort /a /b | cat /a | cat /b`
- 60
  - 40
  - 100
  - 160
  - 200
99. What is the result of this exact command line: `echo /foo bar`
- the contents of the files `/foo` and `bar` will be displayed
  - all the files under directory `/foo` with the name `bar` will be displayed
  - file `/foo` will be copied to `bar`
  - the two text strings `/foo` and `bar` will be displayed
  - the names of the pathnames `/foo` and `bar` will be displayed
100. Which of these statements is true?
- Command `apropos` is an exact synonym for command `man`.
  - To erase an entire line of typing, type `[ALT]-[DELETE]`.
  - To interrupt a Unix process from the keyboard, type `[CTRL]-[D]`.
  - The `file` command creates a new, empty file in the current directory
  - To indicate End-of-File (no more input) to a program, type `[CTRL]-[D]`.
101. How many arguments and options are there to the command: `wc -wc wc`
- Two command line arguments, one of which contains two bundled options.
  - Two command name arguments and two bundled options.
  - Two options, no arguments.
  - Two arguments, one of which is a single option and the other is a pathname.
  - Two arguments, no options.
102. If `/etc/passwd` is a file name, which pathname always leads to the same file?
- `/etc/passwd/.`
  - `/etc/./passwd`
  - `./etc/passwd`
  - `./etc/./passwd`
  - `/etc/etc/./passwd`
103. The shell expands a leading tilde (`~`) in a pathname (e.g. `~/foo`) to be:
- the current directory
  - the ROOT directory
  - the directory `/root`
  - the parent directory
  - your HOME directory
104. If file `foo` 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:  
`cat foo foo | sort | tail -n 4 | head -n 1`
- 6
  - no output
  - 1
  - 8
  - 4
105. Which `CTRL` key will erase a full line of typing in a terminal window?
- `^D`
  - `^R`
  - `^C`
  - `^I`
  - `^U`





124. If file **foo** contains 99 lines, each of which is the two-digit line number of the line in the file (01 through 99), what is the output on your screen of this command:  
`sort -r foo foo | tail -n 4 | head -n 1`  
 a. 96                      b. 02                      c. 98  
 d. 96 96                    e. 04 04
125. 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/passwd/../../../../.**  
 e. **././etc/passwd**
126. In an empty directory, how many arguments are passed to the **cat** command in this command line: `touch a1 a2 ac ba .a ; cat a*`  
 a. 3                      b. none                      c. 4                      d. 1                      e. 2
127. 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`  
 a. there is a second copy of the file **fil** in the file named **y**  
 b. the directory **x** now contains only a file named **y**  
 c. the directory **x** is still empty  
 d. the command fails because the path **x/./fil** does not exist  
 e. the command fails because the path **x/../../../../me** does not exist
128. 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/.on dir/.tw dir/.th**  
 b. **dir/. dir/.. dir/.on dir/.tw dir/.th dir/.f.**  
 c. no output  
 d. **dir/\***  
 e. **dir/.f.**
129. If **ian** is a sub-directory that contains only the file **foo**, what happens after this command: `mv ./ian/./foo ./ian/./bar`  
 a. there is a second copy of the file **foo** in the file named **bar**  
 b. the command fails because the name **./ian/./bar** does not exist  
 c. the directory **ian** now contains only a file named **bar**  
 d. the directory **ian** is now empty  
 e. the command fails because the name **./ian/./foo** does not exist
130. If file **/a** contains 3 lines, and file **/b** contains 5 lines, then how many lines are output on your screen by this command line: `cat /a | sort /b`  
 a. 8                      b. 0                      c. 5                      d. 3                      e. 2

131. What is true about this command line: `date >ls ; ls -ls ls >wc`  
 a. The **wc** command counts the output of the **ls** command.  
 b. The **ls** command is executed more than once.  
 c. The **ls** command receives the output of **date** on standard input.  
 d. The shell finds and executes three different commands.  
 e. The file **wc** has one line in it.
132. What is the output on your screen after this command line:  
`mkdir dir ; touch dir/.aa dir/.bb ; echo dir/*`  
 a. **dir/.aa dir/.bb**  
 b. no output  
 c. **dir/\***  
 d. **dir/**  
 e. **dir/. dir/.. dir/.aa dir/.bb**
133. What is in file **foo** after this command line: `echo 1 2 >foo 3`  
 a. **echo 1 2**                                      b. **3**  
 c. **1 2 3**                                      d. nothing (empty file)  
 e. **1 2**
134. In a manual page **SYNOPSIS** section, ellipsis (three dots) (**...**) mean:  
 a. a hidden directory                              b. no special meaning  
 c. something that is optional                      d. the parent directory  
 e. something that is repeated
135. If **pig** is a sub-directory that contains only the file **dog**, what happens after this command: `mv pig/dog pig/./cat`  
 a. the command fails because the name **cat** does not exist  
 b. the directory **pig** now contains only a file named **cat**  
 c. the command fails because the name **pig/./cat** does not exist  
 d. the directory **pig** is now empty  
 e. there is a second copy of the file named **dog** in the file named **cat**
136. The shell meta-character used to separate multiple separate commands on the same line of typing is:  
 a. **:**                      b. **+**                      c. **,**                      d. **@**                      e. **;**
137. What is the output of this command line in an empty directory:  
`touch .1 .2 .3 4 5 6 ; echo .*`  
 a. **.\***  
 b. **4 5 6**  
 c. **. . . .1 .2 .3**  
 d. an error message from **echo** saying **.\*** does not exist  
 e. **.1 .2 .3 4 5 6**
138. In an empty directory, how many arguments are passed to the **cat** command in this command line: `date >a1 ; touch a2 ba ca ; cat a*`  
 a. 3                      b. 1                      c. none                      d. 4                      e. 2

139. 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`?
- `cp ../etc/passwd ../me/foo`
  - `cp ../home/me/./etc/passwd ./me/./foo`
  - `cp ../../etc/passwd /me/foo`
  - `cp ../etc/passwd ./me/foo`
  - `cp ./me/./etc/passwd ../home/me/foo`
140. In an empty directory, what is the output on your screen after this command line:
- ```
echo hi >a ; sort * 1>/dev/null
```
- `hi`
  - `a`
  - no output
  - `sort: 1>/dev/null: No such file or directory`
  - `sort: *: No such file or directory`
141. If I am in directory `/home/me` and `mt` is an empty sub-directory, what is true after this command line: `touch foo ; mkdir bar ; mv foo bar/mt`
- the directory `mt` now contains a file named `foo`
  - the directory `mt` now contains a directory named `bar`
  - the command fails because `bar/mt` is not a directory
  - the directory `bar` now contains a file named `foo`
  - the directory `mt` is still empty
142. What is the output of this command line in an empty directory:
- ```
touch .a .b .c ; echo [.]*
```
- `[.]*`
  - `...a .b .c`
  - an error message from `echo` saying `[.]*` does not exist
  - no output
  - `.a .b .c`
143. Which of these characters is *not* a shell GLOB meta-character?
- `?`
  - `*`
  - `#`
  - `]`
  - `[`
144. What command displays the sizes of files in the current directory?
- `cat -s`
  - `ls -l`
  - `ls -p`
  - `ps -l`
  - `ps -s`
145. What is the output of this successful command sequence?
- ```
cd /home/dir ; mkdir one ; mkdir two ; pwd
```
- `/home/dir/one`
  - `/two`
  - `/home/dir/two`
  - `/home/dir/one/two`
  - `/home/dir`
146. Give the minimum number of directories in this pathname: `/a/b/c/d`
- 5
  - 4
  - 1
  - 2
  - 3

147. How many lines are in the file `out` after this command line:
- ```
echo hi >x ; echo ho >>x ; cat x x x >out
```
- 1
  - 6
  - 2
  - 0
  - 3
148. In a directory containing one file named `dog`, what is the output on your screen after this command line: `2>/dev/null ls nosuchfile`
- `ls: nosuchfile: No such file or directory`
  - `bash: 2>/dev/null: command not found`
  - `nosuchfile`
  - no output
  - `dog`
149. If file `foo` 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 foo foo | tail -n 4 | head -n 1
```
- 1 1
  - 6 6
  - 4 4
  - 8
  - 6
150. If file `x` contains ten lines, and file `y` contains twenty lines, then how many lines are in file `cat` after this command line:
- ```
sort x y >z ; tail -n 5 x >x ; sort x y z >cat
```
- 60
  - 0
  - 50
  - 40
  - 55
151. If I am in directory `/home/me` and `mt` is an empty sub-directory, what is true after this command line:
- ```
touch ./foo bar ; rm mt/./foo ../me/bar
```
- the command fails because the path `../me/bar` does not exist
  - the directory `mt` is still empty
  - the directory `me` now contains a file named `bar`
  - the command fails because the path `mt/./foo` does not exist
  - the directory `mt` now contains a file named `foo`
152. In an empty directory, how many lines are in file `out` after this command line:
- ```
ls . .. nosuchfile 2>out
```
- 4
  - 0
  - 1
  - 2
  - 3
153. 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`?
- `cp ../../bin/ls ../foo/xx`
  - `cp ../foo/./bin/ls ../home/foo/xx`
  - `cp ../home/./foo/./bin/ls foo/xx`
  - `cp ./foo/../../bin/ls ./foo/./xx`
  - `cp ../../bin/./ls /foo/xx`
154. What is the correct syntax to redirect both standard output and standard error into the same output file?
- `date 2>1 >out`
  - `date >out 2>&1`
  - `date 1>out 2>1`
  - `date 2>&1 >out`
  - `date 1>out 2>out`

155. In an empty directory, what is the output on your screen after this command line:  
`touch 1 2 .a .b ; echo .*`
- an error message from `echo` saying `.*` does not exist
  - 1 2
  - . . . .a .b
  - .a .b
  - .\*
156. In an empty directory, how many arguments are passed to the `rm` command in this command line: `touch a a1 a2 ba ca ; rm a*`
- 3
  - 4
  - none
  - 2
  - 1
157. If my current directory is `/etc`, which of these pathnames is equivalent to the file name `/etc/passwd`?
- `passwd/.`
  - `../etc/passwd/.`
  - `../../../../etc/./passwd`
  - `/root/etc/passwd`
  - `./etc/passwd`
158. In which section of the manual do you find standard commands?
- 3
  - 8
  - 1
  - 2
  - 4
159. If `/etc/passwd` is a file name, which pathname always leads to the same file?
- `/etc/passwd/.`
  - `./etc/passwd`
  - `../etc/./passwd`
  - `/etc/../../../../passwd`
  - `/etc/passwd/../../../../.`
160. What is the output of this command line in an empty directory:  
`touch 1 2 3 .a .ab .abc ; echo [.]*`
- `[.]*`
  - `.a .ab .abc`
  - an error message from `echo` saying `[.]*` does not exist
  - `. . . .a .ab .abc`
  - no output
161. Which of these pathnames is *not* an absolute pathname (after all shell expansions)?
- `~/foo`
  - `/foo`
  - `$HOME/foo`
  - `foo`
  - `../../../../foo`
162. 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`
- 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 command fails because the path `../me/cat` does not exist
  - the directory `sub` now contains only a file named `cat`
  - the directory `sub/..` now has a file named `cat` in it

163. What happens when you try to change to the parent directory of ROOT, e.g.  
`cd / ; cd ..`
- the shell current directory is still ROOT; no change
  - the shell issues a warning, but changes to the parent
  - you go to the parent directory containing your `C:` drive
  - the shell issues an error message and does not change
  - the shell asks you to retype this invalid directory
164. Which command line displays the contents of the Unix `passwd` file one page at a time?
- `cat /etc/passwd less`
  - `cat less | /etc/passwd`
  - `/etc/passwd cat less`
  - `/etc/passwd | less`
  - `less /etc/passwd`
165. If `foo` is a sub-directory that contains only the file `bar`, what happens after this command: `cp foo/bar ./foo/./me`
- the command fails because the name `foo/bar` does not exist
  - there is a second copy of the file `bar` in the file named `me`
  - the directory `foo` now contains only a file named `me`
  - there is a second copy of the file `bar` in directory `foo`
  - the directory `foo` is now empty
166. What is the absolute pathname of the Unix/Linux password (account) file?
- `/lib/passwd`
  - `/etc/passwd`
  - `/var/passwd`
  - `/bin/passwd`
  - `/usr/passwd`
167. 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 directory `sub` now contains only a file named `cat`
  - the directory `sub/..` now has a file named `cat` in it
  - the command fails because the path `../myhome/cat` does not exist
  - 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`
168. In an empty directory, how many words are in file `out` after this command line:  
`touch 1 2 3 2 1 ; ls >out`
- 4
  - 5
  - 3
  - 0
  - 6
169. 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`
- no output
  - 1 1 3 cat
  - 2 2 4 cat
  - 0 0 0 cat
  - 1 1 2 cat
170. What is in the file `bar` after this command line:  
`echo hi >x ; echo ho >x ; mv x y >bar`
- `hi` followed by `ho`
  - `ho`
  - no such file (nonexistent)
  - `hi`
  - nothing (empty file)

171. Which pathname almost always leads to the same file named: `/etc/passwd`
- `./etc/./passwd`
  - `/etc/passwd/.`
  - `/etc/./passwd`
  - `./etc/passwd`
  - `/etc/etc/./passwd`
172. In an empty directory, what happens after this command line:  
`mkdir a b c ; mv a b c`
- an error message: `mv: target 'c' is not a directory`
  - the directories `a`, `b`, and `c` are moved to the current directory
  - the directories `a` and `b` are appended to the directory `c`
  - the directories `a`, `b`, and `c` are moved to the directory `c`
  - the directories `a` and `b` are moved into the directory `c`
173. Which command line displays only the non-hidden names in the current directory that contain the letter `a` (and no other names)?
- `echo ?a?`
  - `echo *a*`
  - `echo [a]`
  - `echo a*`
  - `echo *a`
174. Which of these command line will make file `foo` contain all of the content of file `a` followed by all of the content of file `b`?
- `cp a b >foo`
  - `cat a >foo ; cat b >>foo`
  - `mv a b >foo`
  - `cp a >foo ; cp b >>foo`
  - `echo a b >foo`
175. In an empty directory, how many arguments are passed to the `cat` command in this command line: `touch a1 a2 ba ca ; cat a*`
- 1
  - 3
  - 2
  - none
  - 4
176. What is the output on your screen of this command line:  
`echo pig >one ; echo cow | head -n 2 one`
- an error message
  - `pig` followed by `cow`
  - `pig`
  - `cow` followed by `pig`
  - `cow`
177. Which of these commands always returns you to your account HOME directory?
- `cd home`
  - `cd /home`
  - `cd ..`
  - `cd /home/..`
  - `cd`
178. 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`
- the command fails because the path `../me/old` does not exist
  - the parent directory of `dir` now has a file named `old` in it
  - the directory `dir` now contains only a file named `old`
  - the command fails because the path `./dir/./new` does not exist
  - there is a second copy of the file named `new` in the file named `old`

179. 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 -n 3 | head -n 1`
- 8 8
  - 8
  - 2 2
  - 1
  - 9
180. What would you type to find the string `tony` in the file `/etc/passwd`?
- `grep tony /etc/passwd`
  - `cat tony /etc/passwd`
  - `find /etc/passwd -user tony -print`
  - `grep /etc/passwd tony`
  - `find /etc/passwd -name tony -print`
181. What is the output on your screen of this command line:  
`echo pig >one ; echo bat | tail one`
- `pig` followed by `bat`
  - an error message
  - `bat`
  - `pig`
  - `bat` followed by `pig`
182. 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`
- 0
  - 3
  - no output
  - 5
  - 2
183. What is the output of this command line in an empty directory:  
`touch .12 .345 .6789 ; echo .??*`
- `.??*`
  - `.12 .345 .6789`
  - an error message from `echo` saying `.??*` does not exist
  - `. . . .12 .345 .6789`
  - no output
184. What is the output on your screen of this command line:  
`echo wc >wc ; wc wc >wc ; cat wc`
- 1 1 2 wc
  - 1 1 3 wc
  - no output
  - 0 0 0 wc
  - wc
185. If file `foo` 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:  
`cat foo foo | sort -r | head -n 4 | tail -n 1`
- 8
  - 5
  - 7
  - 6
  - 9
186. The output of the `find` command is:
- a recursive list of users logged in to the system
  - a recursive list of pathnames
  - finds patterns in a file corresponding to lines
  - finds lines in a file matching a pattern
  - account names matching a pattern

187. 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`  
 a. 10      b. 8      c. 12      d. 0      e. 7
188. Which pathname almost always leads to the same file named: `/etc/passwd`?  
 a. `/etc/./etc/./passwd`      b. `./etc/passwd`  
 c. `./etc/passwd`      d. `/etc/passwd/.`  
 e. `/etc/./etc/./passwd`
189. If my current 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 ./me/./etc/passwd ../home/me/foo`  
 d. `cp ../etc/passwd ./me/foo`  
 e. `cp ../home/me/./etc/passwd ./me/./foo`
190. In an empty directory, what is the output on your screen after this command line:  
`ls nosuchfile 2>out`  
 a. 2 not found      b. no output  
 c. nosuchfile 2 not found      d. nosuchfile not found  
 e. nosuchfile
191. In an empty directory, how many words are in file **foo** after this command line:  
`date >.bar >.out ; ls >foo`  
 a. 0      b. 3      c. 4      d. 2      e. 1
192. If file **/a** contains 7 lines, and file **/b** contains 5 lines, then how many lines are in file **/c** after this command line:  
`cat /a /b >/c ; sort /c >/c ; sort /c /a /b >/c`  
 a. 24      b. 0      c. 12      d. 7      e. 5
193. Which Unix command line deletes a directory and everything inside it?  
 a. `rm -r dir`      b. `rm -all dir`  
 c. `rmdir -r dir`      d. `rmdir -all dir`  
 e. `deltree -all dir`
194. If my current working directory is `/var`, which command copies the password file into directory `/var/ian` under the name **bar**?  
 a. `cp ../../etc/passwd ../ian/bar`  
 b. `cp ../ian/./etc/passwd ../var/ian/bar`  
 c. `cp ./ian/./etc/passwd ian/bar`  
 d. `cp ../../etc/./passwd /ian/bar`  
 e. `cp ../var/./ian/./etc/passwd ./ian/./bar`
195. How many lines are in file **out** after this command line:  
`date >wc >cat >out`  
 a. 2      b. 1 6 29      c. 0  
 d. 0 0 0      e. 1

196. What would you see if you typed this command: `cat /foo`  
 a. The contents of the file **foo** located in your HOME directory  
 b. The contents of the file **foo** located in the ROOT directory  
 c. The contents of the file **foo** located in the parent directory  
 d. The contents of your subdirectory named **foo**  
 e. The contents of your directory named **foo**
197. If file **a** contains 20 lines, and file **b** contains 30 lines, then how many lines are in file **out** after this command line:  
`cat a b >c ; head c >c ; sort a b c >out`  
 a. 0      b. 100      c. 60      d. 30      e. 50
198. Which pathname almost always leads to the same file named: `/bin/ls`  
 a. `/bin/./bin/./ls`      b. `./bin/./ls`  
 c. `/bin/./ls`      d. `./bin/ls`  
 e. `./bin/./ls/.`
199. Which command line lists all possible utilities available for compiling programs?  
 a. `man compile`      b. `grep 'compile' /etc/`  
 c. `man -k compile`      d. `locate compile`  
 e. `find compile`
200. What is the output on your screen after this command line:  
`echo hi >a ; ls a >wc`  
 a. 1 1 2      b. 3      c. 2  
 d. 1 1 3      e. no output
201. What is the output of this command line in an empty directory:  
`touch .a .b .c ; echo .??*`  
 a. `.??*`  
 b. no output  
 c. `.a .b .c`  
 d. an error message from `echo` saying `.??*` does not exist  
 e. `. . .a .b .c`
202. In an empty directory, how many arguments are passed to the **rm** command in this command line: `date >a1 ; touch a2 ba ca >all ; rm a*`  
 a. 3      b. 4      c. 1      d. none      e. 2
203. If directory **dir** contains these four three-character file names: `.aa`, `.ab`, `.a?`, `.a*`, then what is the output on your screen of this command line:  
`echo dir/???`  
 a. `dir/.a?`  
 b. `dir/.aa dir/.ab dir/.a? dir/.a*`  
 c. no output  
 d. `dir/.aa dir/.ab`  
 e. `dir/???`

204. What is an operating system?
- An accounting package program.
  - A word-processing computer program.
  - A computer program that manages the hardware.
  - A web-browser program.
  - A video display card.
205. In an empty directory, what is the output on your screen after this command line:  
`touch a ; ls >wc -l`
- 2
  - 3
  - 1
  - 0
  - no output
206. If file **a** contains 2 lines, and file **b** contains 3 lines, then how many lines are in file **c** after this command line:  
`sort a b >c ; cat a >>b ; sort c b >c a`
- 0
  - 12
  - 5
  - 7
  - 8
207. What do you do to erase an entire line of typing in the shell?
- select the line with the mouse and use the **DEL** key
  - type **[CTRL-W]**
  - type **[CTRL-U]**
  - type **[CTRL-D]**
  - type **[CTRL-C]**
208. What is your HOME directory?
- The directory that your shell is in now
  - The directory named **/home**
  - This is where "root" goes when "root" logs in to the system
  - The directory into which you are placed when you first log in
  - The top directory of the Unix/Linux/BSD/OSX file system tree
209. What is the output of this command line in an empty directory: `cat *`
- \*
  - . . .
  - .
  - no output
  - an error message from `cat` saying `*` does not exist
210. If I am in directory **/home/me** and **mt** is an empty sub-directory, what is true after this command line: `touch foo ; mkdir bar ; mv foo mt/bar`
- the directory **mt** now contains a file named **bar**
  - the directory **mt** is still empty
  - the command fails because **mt/bar** is not a directory
  - the directory **bar** now contains a file named **foo**
  - the directory **mt** now contains a file named **foo**

211. In an empty directory, what is the output on your screen after this command line:  
`ls 2>/dev/null nosuchfile`
- `ls: /dev/null: No such file or directory`
  - no output
  - `nosuchfile`
  - `ls: nosuchfile: No such file or directory`
  - `ls: 2>/dev/null nosuchfile: No such file or directory`
212. How many words are in the file **x** after this command line:  
`echo 1 2 >x ; echo 3 >x ; echo 4 >>x`
- 1
  - 4
  - 0
  - 3
  - 2
213. What does *quoting* mean on a shell command line?
- using a leading tilde ("**~**") on a pathname to mean your HOME directory
  - typing a "control" character using the **[CTRL]** key
  - turning off the special meaning of shell meta-characters
  - using more than one pathname argument to a command, e.g. `rm a b c`
  - setting the **PS1** variable to be your shell prompt
214. Which command line tells you the recursive count of all pathnames under the current directory and all subdirectories?
- `find | wc`
  - `wc *`
  - `wc "$PWD"`
  - `ls | wc`
  - `wc .`
215. Which command line does *not* show any lines from inside the file **bat**?
- `sort bat`
  - `head bat`
  - `less bat`
  - `ls bat`
  - `tail bat`
216. What is the output of this command line in an empty directory:  
`touch a .a bc .bc def ; echo [ab]*`
- `a bc`
  - no output
  - `[ab]*`
  - `a .a bc .bc`
  - an error message from `echo` saying `[ab]*` does not exist
217. If my current directory is **/usr**, which of these pathnames is equivalent to the pathname **/usr/x/y/z**?
- `/x/y/z`
  - `../usr/y/z`
  - `x/./y/z`
  - `./usr/x/y/z`
  - `../x/y/z`
218. In the output of `ls -a`, the two-character name `..` signifies what?
- The parent directory.
  - A file or directory with double links.
  - It begins every name that is hidden.
  - The ROOT directory.
  - The current directory.

219. Which command line shows the file in `/bin` with the largest checksum?
- `cat /bin | sum | sort -nr | head -n 1`
  - `sum /bin/* | sort -nr | head -n 1`
  - `ls /bin/* | sum | sort -nr | head -n 1`
  - `sum /bin | sort -nr | head -n 1`
  - `cat /bin/* | sum | sort -nr | head -n 1`
220. If file `x` contains ten lines, and file `y` contains twenty lines, then how many lines are in file `cat` after this command line:
- ```
sort x y >z ; tail -n 5 y >y ; sort x y z >cat
```
- 60
  - 40
  - 0
  - 45
  - 50
221. The purpose of the `PS1` shell variable is:
- to set the shell prompt
  - to list your suspended jobs
  - to protect your HOME directory from access
  - to find patterns inside a text file
  - to allow access to the ROOT directory
222. How do I search for the string `foo` in the text display output from the `man` command?
- `find foo`
  - `search foo`
  - `/foo`
  - `@foo`
  - select "Search" in the menu
223. To change your own account password, use this exact command line:
- `$ passwd cst8207.idallen.ca`
  - `$ passwd cst8207`
  - `$ passwd root`
  - `$ passwd options LOGIN`
  - `$ passwd`
224. If my current directory is `/lib`, which of these pathnames is equivalent to the file name `/lib/foo`?
- `./lib/foo`
  - `../lib/foo/.`
  - `/foo`
  - `./foo`
  - `../foo`
225. In an empty directory, what is the output on your screen after this command line:
- ```
echo hi >a ; ls nosuchfile 2>/dev/null
```
- `nosuchfile`
  - `ls: nosuchfile: No such file or directory`
  - `a`
  - `ls: 2>/dev/null: No such file or directory`
  - no output

226. Which command pipeline outputs the count of the number of manual page titles that contain the keyword "sort"?
- `man sort | wc`
  - `wc man sort`
  - `man -k sort | wc`
  - `man sort ; wc`
  - `wc -k sort`
227. In an empty directory, what is the output on your screen after this command line:
- ```
ls 1>/dev/null nosuchfile
```
- `ls: 1>/dev/null nosuchfile: No such file or directory`
  - `ls: nosuchfile: No such file or directory`
  - `nosuchfile`
  - `ls: /dev/null: No such file or directory`
  - no output
228. If a shell token with a GLOB pattern contains two slashes, how many slashes can be in each matched pathname?
- one or two
  - zero, one, or two
  - two or more
  - one, two, or more
  - exactly two
229. **Did you read all the words of the test instructions on page one?**
- Igen** (Yes - Hungarian)
  - Sim** (Yes - Portuguese)
  - Tak** (Yes - Polish)
  - Jes** (Yes - Esperanto)
  - Taip** (Yes - Lithuanian)