c. /bar

e. /home/myhome/bar

PRIN	NT Name:		LAB Se	ection:
Test '	Version: 030	One-Answer	r Multiple Choice	102 Questions
☞ Us ☞ Pu ☞ Fil	ead <b>all</b> the words of these ins se your full, unabbreviated na it the three-digit <b>Test Version</b> Il in the bubbles with pencil of anage your time. Answer qu	ame on the mark-se  n above into NO. OI  only, no pen. Enter	ense form. Do not a F QUESTIONS and N r your NAME, Test	bbreviate your name.  O. OF STUDENTS  Version, and answers.
	Given my directory dir and my file dir/bar owned by me, which permissions allow me to delete the file dir/bar from the directory, but not change the content (data) in the file?  a. Permissions 300 on directory dir and 400 on file dir/bar.  b. Permissions 100 on directory dir and 300 on file dir/bar.  c. Permissions 300 on directory dir and 200 on file dir/bar.  d. Permissions 100 on directory dir and 500 on file dir/bar.  e. Permissions 500 on directory dir and 500 on file dir/bar.			
	What is the output of this coecho bat >one; a. bat followed by sky c. sky e. an error message	echo sky   h	ead -2 one bat sky followed by l	bat
3.	What is the output of this se echo hi >hi ; he a. 1 1 3 hi d. 1 1 2 hi		wc hi	2 4 hi
	What is the bash shell outpontaining 765 files with national foo="*"; echo	mes that are all the		
	<ul> <li>a. *</li> <li>b. \$foo</li> <li>c. an asterisk ('*') and the</li> <li>d. the file names 1 through</li> <li>e. all the file names that sta</li> </ul>	765		
	What is the output on your s  a=9; b=9; [\$a  a. the number 1 or 0 follow  b. no output  c. 0  d 1	a -le \$b ] ;	echo \$?	nmands:

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```
If my current directory is /bin, which of these pathnames is equivalent to the file
    name /bin/ls?
    a. ls/.
                              b. ../bin/ls/.
                                                       c. ../../bin/ls
    d. ./bin/ls
                              e. /root/bin/ls
    In an empty directory, how many files are created by this command:
         touch a "b c" ' d e
    a. 7
                    b. 6
                                   c. 4
                                                  d. 3
                                                                 e. 5
    What is the output on your screen of this command sequence:
         echo pig >one ; echo bat | tail one
    a. bat
                                          b. an error message
    c. bat followed by pig
                                           d. pig
    e. pig followed by bat
    Which command below removes only this four-character file name containing a
    special character (and no others): abc*
    a. rm abc/*
                              b. rm abc*
                                                       c. \text{ rm abc} \times
    d. rm abc\\*
                              e. rm abc//*
10. Which of the following regular expressions would match lines that contain one or
    more alphanumeric characters only?
    a. [a-z0-9] [a-z0-9] *
    b. [[:alnum:]] [[:alnum:]] *
    c. ^[[:alnum:]][[:alnum:]]*$
    d. ^[[:alnum:]]*$
    e. [[:alnum:]]*
11. If the file foo in the current directory contains just the line 123, what is the output
    of the following command: grep '[[:alpha:]]' foo
                              b. an error message
    a. 123
                                                       c. foo
    d. dbd
                              e. no output
12. If you type the command grep pattern
    which key sequence will send an EOF and take you immediately back to the
    command prompt?
    a. [CTRL-R]
                              b. [CTRL-D]
                                                       c. [CTRL-C]
    d. [CTRL-L]
                              e. [CTRL-U]
13. What is the output of this successful command line?
         cd /home/myhome ; mkdir foo ; mkdir bar ; pwd
    a. /home/myhome/foo/bar
                                          b. /home/myhome/foo
```

e. test: \$a: integer expression expected

d. /home/myhome

of three commands:

14. Which of the following is true, given this long directory listing from 1s: 755 drwxr-x--x 256 ian user 512 May 30 12:35 dir a. The number 256 is the octal permissions of this directory. b. The number 755 is the count of links (names) this directory has. c. The number 512 is the count of links (names) this directory has. d. The number 256 is the inode number of this directory. e. The number 512 is the size of this directory. 15. What is in file **cow** after running this **bash** shell command line? echo one two >cow three a one two three h echo one two d. one two cow three c. no output (empty file) e. one two 16. 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. the directory  $\mathbf{x}$  now contains only a file named  $\mathbf{y}$ b. the command fails because the path x/./fil does not exist c. the directory  $\mathbf{x}$  is still empty d. there is a second copy of the file **fil** in the file named **y** e. the command fails because the path x/.../me does not exist 17. If file ./a contains thirty lines, and file ./b contains fifty lines, then how many lines are output by this command: cat ./a | sort ./b a. 20 *b.* no lines (empty file) c. 80 d. 50 e. 30 18. What is the output on your screen of the following command sequence: echo hi >wc ; wc wc >hi ; cat hi b. 1 1 2 wc a. 1 1 3 wc c. no output d hi e. 0 0 0 wc 19. What minimal permissions must you have on a directory to be able to execute successfully the command ls . from *inside* the directory? h. r-c. r-x d. rw-20. If the file **foo** in the current directory contains just two lines **dbd**, and **123**, what is

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```
21. If x=8 and y=9 then which of the following bash command lines outputs only
    the word foobar (and nothing else)?
    a. [x!=x] \mid | echo foobar
    b. [ x = x ] && echo foobar
    c. [ x -ne y ] && echo foobar
    d. [!x = y] && echo foobar
    e. [x -ne y] || echo foobar
22. What is the result of this exact command line:
         echo /etc/passwd hello
    a. the contents of the files "/etc/passwd" and "hello" will be displayed
    b. all the files under "/etc/passwd" with the name "hello" will be displayed
    c. a list of file names matching "/etc/passwd" and "hello" will be displayed
    d. file "/etc/passwd" will be copied to "hello"; the names will be displayed as well
    e. the text "/etc/passwd" and "hello" will be displayed
23. Which command line would show the inode number of a file?
                              b. ls -i file
    a. ps -1 file
                                                       c. 1s -1 file
    d. cat -1 file
                              e. cat -i file
24. What would you type to change the permissions on a file to --x-wx-w-?
    a. chmod 121 file
                                           b. chmod 122 file
    c. chmod 132 file
                                           d chmod 654 file
    e. chmod 322 file
25. What is the output on your screen of the following sequence of commands:
         x=1; y=2; test x - 1e; echo ?
    a. the number 0 or 1 followed by another 0 or 1 on a new line
    b. test: $x: integer expression expected
    c. 0
    d. no output
    e. 1
26. What is the correct syntax to redirect both standard output and standard error into
    the same output file?
    a. command 2>1 >out
                                           b. command >out 2>&1
    c. command >out 2>1
                                           d. command 2>&1 >out
    e. command 2>out >out
```

c. 123

a. foo b. dbd d. no output e. an error message

```
a=123 ; source bar ; echo "I see '$a' here."
                               b. "I see abc here."
a. I see 'abc' here.
                               d. I see Sa here.
c. I see '$a' here.
e. I see '123' here.
```

27. If file bar contains the line a=abc then what is the bash output of this sequence

```
28. Which line below puts the count of the number of lines in the password file into the variable foo?
```

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```
a. foo=$( wc -1 </etc/passwd )
b. foo=$( awk -F: /etc/passwd | wc -1 )
c. foo=$( cat -c /etc/passwd )
d. foo=$( wc /etc/passwd | awk echo $1 )
e. foo=$( wc -1 /etc/passwd | awk "print $1" )</pre>
```

29. Which command displays the contents of the Unix **passwd** file one page at a time?

```
a. more /etc/passwd
c. cat /etc/passwd
d. page /etc/passwd
e. head /etc/passwd
```

30. Which of these statements is true?

a. If ./p is an empty directory, ls ./p/.\* produces an error message.

b. The ls dir command looks up the directory argument dir in your \$PATH.

c. If ./q is an empty directory, echo ./q/.\* produces an error message.

*d.* Either single or double quotes will stop shell glob (wildcard) patterns from expanding.

e. Typing ./script and bash script always give identical results.

31. If bar is an executable script containing the line cow=pig then what is the bash output of this sequence of three commands:

```
cow=cat; ./bar; echo "the '$cow' ate"

a. the $cow ate
b. the 'cow' ate
c. the 'pig' ate
d. the 'cat' ate
e. the '$cow' ate
```

32. If dog is an executable script containing the line: umask 0002 what is the output of the following sequence of commands:

```
umask 0077 ; ./dog ; umask
a. 0075
b. 0079
c. 0002
d. no output on screen
e. 0077
```

33. In a directory that contains only the file single, what happens after this command: mv single double

a. the command fails because "single" is not a directory

b. an empty file named "double" is created

c. the command fails because the name "double" does not exist

d. there is only the file named "double" in the directory now

e. there is a second copy of the file "single" in the file named "double"

```
34. What is the output of the following sequence of bash commands:

a=1; b=2; test $a -ge $b; echo $?

a. test: $a: integer expression expected

b. the number 1 or 0 followed by another 1 or 0 on a new line

c. no output
```

d. 0e. 1

35. If directory cow contains only these four three-character file names: .AA, .A1, .BB, .B., then what is the output of this command line: echo cow/\*

```
a. no output on screen
```

b. cow/.AA cow/.A1 cow/.BB cow/.B.

c. cow/\*

 $d. \cos /.AA \cos /.A1 \cos /.BB$ 

e. cow/.B.

36. What command shows all the lines in file **foo** that contain the string **bar**?

```
a. grep bar >foob. cat foo > grep barc. grep foo bard. grep bar fooe. grep cat foo bar
```

37. What is the **bash** shell output of this two command sequence:

```
PATH=/bin/ls:/bin/cat:/bin/sh ; cat nosuchfile
```

a. bash: cat: command not found

b. bash: /bin/sh: No such file or directory

c. ls: /bin/cat: command not found

d. bash: /bin/ls: command not found

e. cat: nosuchfile: No such file or directory

38. Given the following bash shell command line: read xx yy zz which user keyboard input line below will assign the text 22 to the shell variable named yy?

```
      a. 11,22,33
      b. 11 22 33

      c. 11;22;33
      d. 11:22:33

      e. xx=11 yy=22 zz=33
```

39. What Unix command line will show you all of the processes currently running?

```
a. which ps b. whereis ps c. ps all d. finger ps e. ps aux
```

40. Which command sequence creates a directory into which anyone can put a file, but in which nobody can see the names of the files that are there?

```
a. mkdir protected; chmod 777.
b. mkdir protected; cd protected; chmod go+wx.
c. mkdir protected; cd protected; chmod go-x.
d. mkdir protected; chmod 333 protected
e. mkdir protected; chmod 777 protected
```

```
41. What is true about this output from ls -il foo bar
     23 -rwxr---- 3 root root 2 Jul 31 12:33 foo
     24 -rwxr---- 3 root root 2 Jul 31 12:33 bar
     a. foo and bar are names for the same file
     b. this output is not possible
    c. foo and bar each have two names (four names total)
     d foo and bar are two of three names for this file
     e. foo and bar are names for different files
42. What command can you use to delete a directory?
                               b. mvdir
     a. erase
                                                         c. deldir
     d. delete
                               e. rmdir
43. What is the output on your screen of the following sequence of commands:
         i=00; [$i=0]; echo $?
     a. 0
     b. the number 0 or 1 followed by another 0 or 1 on a new line
     d. no output
     e. test: $i: integer expression expected
44. If the file foo in the current directory contains just the line dbd, what is the output
     of the following command: grep '[b1]' foo
    a. foo
                               b. no output
                                                         c. dbd
     d. 123
                               e. an error message
45. If ./foo/bar were a file of text, what would be the output of this exact command
    line: diff ./foo/bar ./foo/bar
     b. an error message because diff doesn't allow the same file name twice
    c. an error message because diff only allows one file name
     d. several lines, which are the lines that are different between the two files
     e. the contents of file ./foo/bar would be displayed twice
46. Which command below removes only this five-character file name containing a
     special character (and no others): yy?yy
     a. \text{ rm yy} ?yy
                               b. \text{ rm yy/?yy}
                                                         c. \text{ rm yy} \?yy
     d. rm yy?yy
                               e. rm yy//?yy
47. Which command line shows just the count of lines in the file?
                     awk '{print 1}'
    a. wc file
                     awk '{print $1}'
     b. wc file
```

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```
48. What would you type to change the permissions on a file to rw-r--r-?
                                         b. chmod 311 file
    a chmod 344 file
    c. chmod 211 file
                                         d. chmod 644 file
    e. chmod 244 file
49. 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?
    a. cp ../etc/passwd ./me/foo
    b. cp ../etc/passwd ../me/foo
    c. cp ../home/me/../etc/passwd ./me/./foo
    d. cp ./me/../etc/passwd ../home/me/foo
    e. cp ../../etc/passwd /me/foo
50. Which of these statements is true?
    a. You can make a hard link to a directory.
    b. You only need "r--" permission on directory "foo" for "ls -l foo" to
    c. If you give me write permission on a file owned by you, I can then use chmod
       to change its permissions.
    d. The "ln" command takes two arguments, so the maximum number of hard links
       a file can have is two.
    e. To make a hard link to file "foo" named "bar", file "foo" must exist.
51. In an empty directory, what is the shell output of these three commands:
        touch .1 .2 .3 11 12; b='.1* .2*'; echo '$b'
    a. '.1* .2*'
                             b. 11 .1 12 .2
                                                     c. .1* .2*
    d sb
                             e. .1 .2
52. If a=aaa and b=bbb then what is the output of the following sequence of bash
    commands: if $a = $b; then echo $a; fi
    a. test: $a: integer expression expected
    b. test: aaa: integer expression expected
    c. aaa
    d. bash: aaa: command not found
    e. no output
53. What is the output of the following sequence of bash commands:
        date='Friday March 12'; test date = date
    b. test: too many arguments
    c. 1
    d. no output
```

c. wc file | awk '{print #1}'

d. wc file | awk '[print \$1]'

e. wc file | awk '[print #1]'

e. Fri Mar 12 10:20:39 EST 2004

*a.* 3 out

*d.* 5 out

```
54. What is the output on your screen of the following command sequence:
         i=0; test $i = 00; echo $?
    a. 0
     b. the number 0 or 1 followed by another 0 or 1 on a new line
    c. test: $i: integer expression expected
    d. 1
     e. no output
55. What is the output on your screen of the following sequence of commands:
         x=pig ; y=bat ; touch $x ; [ -z $x ] ; echo $?
    a. test: $x: integer expression expected
     b. no output
     c. the number 0 or 1 followed by another 0 or 1 on a new line
     d. 1
     e. 0
56. Which of the following regular expressions would match lines that contain no white
    a. [^[:space:]]*
                                            b. [^[:space:]]*$
    c. [^:space:]*
                                            d. ^[[:space:]]*$
     e. ^[^[:space:]]*$
57. If the current directory contains files abc, bbc, cbc, and bbc contains just the line
     dbd, what is the output of the following command: grep bb* bbc
     a. bbc
                              b. an error message
                                                         c. dbd
     d. cbc
                              e. no output
58. Given my directory ./a/b and my file ./a/b/c owned by me, which
     permissions allow me to change or create new content (data) in the file ./a/b/c
    but not delete the file?
     a. Permissions 400 on directory ./a/b and 400 on file ./a/b/c.
    b. Permissions 100 on directory ./a/b and 100 on file ./a/b/c.
    c. Permissions 600 on directory ./a/b and 700 on file ./a/b/c.
     d. Permissions 200 on directory ./a/b and 200 on file ./a/b/c.
     e. Permissions 100 on directory ./a/b and 200 on file ./a/b/c.
59. If directory foo contains only these three three-character file names: .11, .12,
     ..., then what is the output of the following bash shell command line:
         echo foo/???
    a. foo/???
    b. foo/...
    c. foo/.11 foo/.12 foo/...
    d. no output
     e. foo/.11 foo/.12
```

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```
60. Given this sequence of commands:
     echo foo >a ; ln a b ; echo bar >>b ; ln a c ; rm a
    What is contained in file c?
    a. no such file (nonexistent)
                                           b. nothing - empty file - no data
    c. foo
                                            d. bar
    e. foo followed by bar
61. Which of these command lines will make file cow contain all of the content of file
    one followed by all of the content of file two?
    a. echo one two >cow
                                            b. cat one two >cow
                                            d. cp one two >cow
    c. cp one >cow two >cow
    e. mv one two >cow
62. What is the bash output of this sequence of two commands:
         x=';'; echo one $x date
    a. one; Mon Sep 30 08:00:00 EDT 2002
    b. one $x date
    c. one followed by Mon Sep 30 08:00:00 EDT 2002 on a new line
    d. one ';' date
    e. one ; date
63. In the output of the command 1s -a, a dot that begins a name signifies what?
    a. A name that is hidden.
    b. A current file.
    c. The parent directory.
    d. A name with an unprintable character.
    e. The current directory.
64. A shell script named bar is executed as follows:
         ./bar "a b" "c d e" f
    Inside the script is the line: echo "$2"
    What is the output on your screen from this line?
    a. b"
                              b. c d e
                                                        c. a b
    d. b
                              e. $2
65. If the current directory contains files abc, bbc, cbc, and bbc contains just the line
    dbd, what is the output of the following command: grep "bb*" bbc
    a. bbc
                              b. dbd
                                                        c. no output
    d. cbc
                              e. an error message
66. Which of the following regular expressions would match lines that contain exactly
    one character of any kind?
    a. ^\?$
                    b. ^?$
                                    c. ^.*$
                                                   d. ^*$
                                                                   e. ^.$
67. What appears on your screen after this bash shell command line?
         echo hi >out ; wc -c out
```

b. 2 out

e. 4 out

c. no output

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

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

69. If directory ./a contains these seven two-character file names: aa, ab, ac, ad, a\*, a?, ??, then which shell command below will remove only the single name **a?** from the directory?

```
a. \text{ rm } ./a/?\?
                          b. rm "./a?"
                                                    c. \text{ rm ./a}?
d. rm ./a/a?
                          e. rm './a/a?'
```

70. Which command below removes *only* this five-character file name containing a special character (and no others): \*test

```
a. rm ''*test''
                     b. rm ./\\*test
                                          c. rm ./*test
                     e. rm "*test"
d. rm \\*test
```

71. 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

a. the file is owned by root

b. you cannot execute the given commands; no file will be created

c. you own the file bar

d. the file is owned by home

e. the file is owned by passwd

72. In an empty directory, what is the **bash** shell output of this three-command sequence: touch aa .a ab .b .c ; x='.a\* .b\*' ; echo '\$x'

```
a. aa .a ab .b
                      b. .a* .b*
d. .a .b
                      e. $x
```

c. '.a\* .b\*'

73. What is the output of this command sequence if run in an empty directory: touch A a ; echo \* ">\*"

```
a. No output
                       b. A a >A a
                                              c. * >*
d. A a
                       e. A a >*
```

74. If a bash shell script named foo contains the line:

if [ "\$1" = '\$2' ] ; then echo SAME ; fi then which of the following command lines will produce **SAME** as output?

```
a. ./foo $2 $2
                               b. ./foo "bar" 'bar'
c. ./foo "$1" '$2'
                                d. ./foo '$2' bar
```

e. ./foo bar bar

75. If foo is a script containing the line TERM=new; export TERM, what is the output of the following sequence of bash commands that use foo:

```
TERM=bar; ./foo; echo $TERM
a. $TERM
                    b. new
                                          c. foo
d. TERM
                     e. bar
```

```
command?
a. use the mouse to select "Search" in the menu
```

76. How do I search for the string xyz in the text display output from the man

```
b. /xyz
```

c. search xyz

d. find xyz

e. @xyz

77. How many command arguments does the shell pass to this **echo** command:

```
echo 'It's a bird! No! It's a plane!'
a. Four arguments.
```

b. One argument.

c. Two arguments.

d. Three arguments. e. Five arguments.

78. If the current directory contains files abc, bbc, cbc, and bbc contains just the line dbd, what is the output of the following command: grep 'bb\*' bbc

```
a. dbd
```

b. an error message

c. no output

d. bbc e. cbc

79. If your PATH contained only the file names /bin/sh, /bin/cat, and /bin/ls, then what would be the bash shell output of this command: cat /etc/passwd

```
a. bash: /bin/sh: command not found
```

b. cat: /etc/passwd: command not found

c. cat: bash: no such file or directory

d. bash: /bin/cat: no such file or directory

e. bash: cat: command not found

80. If ./a/b were a readable empty file, what would be the bash shell output of this two command sequence:

```
PATH=/etc/passwd:/bin/ls:/bin/cat;/bin/cat./a/b
```

a. bash: ls: command not found

b. bash: cat: command not found

c. /bin/cat: ./a/b: No such file or directory

d. no output

e. bash: /bin/cat: command not found

81. What is the output of the following sequence of **bash** commands:

```
false && echo "foo
                       bar $?"
```

a. foo bar 0

b. no output

c. foo bar 1

d. foo bar 0

e. foo bar 1

82. In an empty directory, what appears on your screen after this bash command line? touch a ; ls | wc -l

```
b. 3
                                                   c. 2
a. no output
d. 0
                         e. 1
```

```
83. In an empty directory, what appears on your screen after this bash command line?
                                                                              89. Which command line lists all possible utilities available for sorting files?
        ls 1>/dev/null nosuchfile
                                                                                   a. grep /etc/passwd sort
                                                                                                                       b. man sort
    a. ls: nosuchfile: No such file or directory
                                                                                   c. man | grep sort
                                                                                                                       d. grep sort /etc/passwd
    b. ls: /dev/null: No such file or directory
                                                                                   e. man -k sort
    c. no output
                                                                              90. Which of these commands makes a file owned by me, also executable by me?
    d. nosuchfile
                                                                                   a. chmod u+x ./myfile
                                                                                                                       b. chmod x=u ./myfile
    e. ls: 1>/dev/null nosuchfile: No such file or directory
                                                                                   c. umask 111 myfile
                                                                                                                       d. umask 777 myfile
84. If a=cow and b=dog then what is the output on your screen of the following
                                                                                   e. chmod x+u myfile
    sequence of commands: [ $a = cow -a $b = cow ] ; echo $?
                                                                              91. When doing an ls -a, the output pathname that is a double dot (..) signifies
    a. test: $a: integer expression expected
                                                                                   what?
    b. 1
                                                                                   a. The root directory.
    c. no output
                                                                                   b. The current directory.
    d. the number 1 or 0 followed by another 1 or 0 on a new line
                                                                                   c. A file or directory with double links.
    e. 0
                                                                                   d. A hidden file.
85. Which bash command sequence correctly compares the two numbers and prints
                                                                                   e. The parent directory.
                                                                              92. What appears on your screen after this bash shell command line?
    a, if [4 > 3]; then echo OK; fi
                                                                                       echo hi >a ; cat a | wc -c
    b. if (let 4 < 3); then echo OK; fi
                                                                                   a. no output
                                                                                                           b. 2
                                                                                                                                   c. 1
    c. if [ 4 -gt 3 ] ; then echo OK ; fi
                                                                                   d. 4
                                                                                                           e. 3
    d. if [ ! 4 <= 3 ] ; then echo OK ; fi
                                                                              93. In an empty directory, how many files will be created using the following bash
    e. if (! 4 < 3); then echo OK; fi
                                                                                   shell two-command sequence:
86. In an empty directory, what is the length of the longest file name created by the
                                                                                       x="one 'two two'two three four"; touch $x
    following two-command sequence: a="1234 123 12 1"; touch '$a'
                                                                                   a. 5 files
                                                                                                 b. 3 files
                                                                                                                c. 1 file
                                                                                                                               d. 4 files
                                                                                                                                             e. 2 files
                            b. 4 characters
    a. 3 characters
                                                     c. 13 characters
                                                                              94. What is the output of this sequence of three shell commands:
    d. 2 characters
                            e. 1 character
                                                                                       umask 547; mkdir newdir; ls -ld newdir
87. If cow is a sub-directory that contains only the file dog, what happens after this
                                                                                   a. dr-xr--rwx 1 me me 0 Feb 20 07:55 newdir
    command: mv cow/dog cow/././cat
                                                                                   b. d-w--w--- 1 me me 0 Feb 20 07:55 newdir
    a. the directory cow now contains only a file named cat
                                                                                   c. d-w--wx--- 1 me me 0 Feb 20 07:55 newdir
    b. the command fails because the name cow/././cat does not exist
                                                                                   d. d-w--wxrwx 1 me me 0 Feb 20 07:55 newdir
    c. the command fails because the name cat does not exist
                                                                                   e. dr--r--rw- 1 me me 0 Feb 20 07:55 newdir
    d. the directory cow is now empty
                                                                              95. What appears on your screen after this sequence of commands:
    e. there is a second copy of the file dog in the file named cat
                                                                                       echo 1 >x ; ln x y ; echo 2 >>y ; sort x
88. What is the output of this sequence of three shell commands:
                                                                                   a. empty file - no output on the screen
        umask 762; touch newfile; ls -1 newfile
                                                                                   b. 1 followed by 2
    a. -----xr-x 1 me me 0 Oct 1 1:12 newfile
                                                                                   c. 1
    b. ------ 1 me me 0 Oct 1 1:12 newfile
                                                                                   d. 2 followed by 1
    c. -rw-rw--w- 1 me me 0 Oct 1 1:12 newfile
                                                                                   e. 2
    d. -rwxrw--w- 1 me me 0 Oct 1 1:12 newfile
    e. -----wx 1 me me 0 Oct 1 1:12 newfile
```

96. The -v option to the grep command does what?

- a. turns on the translation of unprintable characters
- b. selects lines that do not contain unprintable characters
- c. prints the version number of the grep command
- d. selects lines that do not contain a match for the supplied pattern
- e. turns off the translation of unprintable characters
- 97. Which command line below outputs only lines 10-15 of the 16-line file named cow?

-15-

```
a. tail -16 cow | head -10
b. head -15 cow | tail -6
c. head -15 | tail -6 cow
d. head -16 cow | tail -5 cow
e. tail -10 cow | head -6 cow
```

98. What is the output on your screen if a user signals an end-of-file from the keyboard during this command sequence? read input && echo \$?

a. an error message
b. \$?
d. no output on screen
e. 0

99. Which Unix command line deletes a directory and everything inside it?

```
a. rmdir -r dirb. rmdir -all dirc. rm -r dird. deltree -all dire. rm -all dir
```

100. If the file **foo** in the current directory contains just the line **dbd**, what is the output of the following command: **grep** '[[:alpha:]]' foo

```
a. dbdb. 123c. an error messaged. no outpute. foo
```

101. Given an existing file of yours named ./a/b/x, what is the output of this sequence of three shell commands:

```
echo hi >./a/b/x ; wc ./a/b/x >./a/b/x ; cat ./a/b/x 
a. 1 1 1 ./a/b/x 
b. 0 0 0 ./a/b/x 
c. no output 
d. 1 1 3 ./a/b/x 
e. 1 1 2 ./a/b/x
```

102. Which of the following programs uses file globbing expressions rather than regular expressions for matching:

```
a. \text{ sed} b. \text{ vi} c. \text{ find} d. \text{ awk} e. \text{ grep}
```