Evaluation: 203 Questions **Name: _____**

Important Instructions

1. Read all the instructions and both sides of all pages.
2. Manage your time when answering questions on this test. Answer the questions you know, first.

Multiple Choice - 203 Questions

This is a practice test containing many practice questions. The real test will contain some questions similar to these. There are probably many more questions in this practice test than there will be time for in the real test. The real test will have approximately one question per minute.

The real test may have some questions unlike anything given here. Knowing the concepts behind the questions is necessary; memorizing these specific answers won't help.

(Office use only: 81 196 167 170 121 59 142 7 82 164 36 85 115 127 53 149 193 55 18 43 146 162 174 78 20 148 144 40 114 32 156 117 188 105 72 21 76 93 11 124 101 197 31 39 165 189 6 45 202 51 119 44 153 64 203 16 176 145 87 90 122 58 109 15 99 141 116 106 25 94 143 28 97 178 136 198 104 190 70 132 63 22 187 191 154 24 74 2 139 130 172 91 38 92 54 199 185 98 195 133 96 140 137 69 159 41 179 75 9 152 169 201 56 163 166 62 183 177 37 4 86 112 175 147 155 57 160 29 89 80 151 3 77 102 34 184 49 12 33 35 17 123 111 26 126 158 100 23 103 110 135 19 171 88 61 79 10 125 42 73 157 182 107 13 52 113 1 192 161 186 68 95 84 5 134 65 14 67 83 108 200 120 118 128 30 48 60 129 150 168 194 8 46 173 66 131 180 181 71 138 50 27 47)

1. What appears on your screen after this sequence of commands:
   `echo one >x ; ln x y ; echo two >>y ; sort x >y ; cat y`
   a. empty file - no output on the screen
   b. **one** followed by **two**
   c. **two**
   d. **two** followed by **one**
   e. **one**

2. 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`
   a. 1
   b. 3
   c. 5
   d. 4
   e. 2

3. What is the output of this command sequence:
   `echo foo >file ; echo bar | sort file`
   a. **foo**
   b. **bar**
   c. **foo** followed by **bar**
   d. an error message
   e. **bar** followed by **foo**

4. If file **x** contains ten lines, and file **y** contains twenty lines, then how many lines are in file **cat** after this sequence of **bash** shell commands:
   `sort x y >z ; tail –5 y >y ; sort x y z >cat`
   a. **40**
   b. **50**
   c. no lines (empty file)
   d. **45**
   e. **60**

5. In an empty directory, how many words are in file **cow** after this **bash** shell command line? `touch dog dog cat ; ls >cow`
   a. **2**
   b. **1**
   c. **3**
   d. no output (empty file)
   e. **4**

6. Which command line displays the contents of the Unix **passwd** file one page at a time?
   a. `cat /etc/passwd >more`
   b. `/etc/passwd | more`
   c. `more | /etc/passwd`
   d. `more /etc/passwd`
   e. `/etc/passwd >more`

7. What is the output of this successful command sequence?
   `cd /home/dir ; mkdir one ; mkdir two ; pwd`
   a. **/home/dir**
   b. **/home/dir/one/two**
   c. **/home/dir/one**
   d. **/home/dir/two**
   e. **/two**

8. If file **foo** contains nine 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 –5 | tail –1`
   a. **5**
   b. **8**
   c. **9**
   d. **6**
   e. **7**

9. What appears on your screen after this sequence of commands:
   `echo one >x ; cp x y ; echo two >>y ; sort x >y ; cat y`
   a. **one** followed by **two**
   b. empty file - no output on the screen
   c. **two** followed by **one**
   d. **two**
   e. **one**

10. What command shows all the lines in file **/etc/group** that contain the string **idallen**?
    a. **cat /etc/group | wc idallen**
    b. **cat /etc/group > grep idallen**
    c. **grep idallen /etc/group**
    d. **grep idallen >/etc/group**
    e. **grep /etc/group idallen**

11. How many arguments does the shell pass to this **echo** command:
    echo " 1 2 "three ' 4 ' five"6"
    a. Nine arguments.
    b. One argument.
    c. Five arguments.
    d. Three arguments.
    e. Four arguments.

12. Which command line lists all possible utilities available for editing files?
    a. **man -k edit**
    b. **man edit**
    c. **finger edit**
    d. **which edit**
    e. **whereis edit**

13. If directory **/a/b** contains these four three-character file names: **.aa**, **.ab**, **.a?**, **.a***, then what is the output of the following **bash** shell command line:
    echo /a/b/???
    a. **/a/b/.aa /a/b/.ab**
    b. **/a/b/???**
    c. **/a/b/.aa /a/b/.ab /a/b/.a? /a/b/.a***
    d. **/a/b/.a?**
    e. no output

14. 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
    a. **foo** and **bar** each have three names (six names total)
    b. **foo** and **bar** are names for the same file
    c. **foo** and **bar** are names for different files
    d. this output is not possible
    e. **foo** and **bar** are two of three names for this file

15. What appears on your screen after this bash shell command line?
    echo hi | wc -c
    a. no output
    b. **1**
    c. **3**
    d. **2**
    e. **0**

16. Which of the following statements is true about this shell command line:
    >bar zoom bar haven
    a. Error: The command name is missing from the command line.
    b. The command **bar** sees three arguments.
    c. The command **zoom** sees two arguments.
    d. The command **bar** sees only two arguments
    e. The command **zoom** sees three arguments.

17. Which of the following pathnames always leads to the same file named: **/etc/passwd**?
    a. **./etc/passwd**
    b. **/etc/./etc/../passwd**
    c. **/etc/../etc/passwd**
    d. **../etc/passwd**
    e. **/etc/passwd/.**

18. What appears on your screen after this **bash** shell command line?
    echo xx >z ; ls z > wc
    a. **1 1 3**
    b. **2**
    c. no output
    d. **1 1 2**
    e. **3**

19. If you type the command **sort**
    which of the following key sequences will send an EOF and take you immediately back to the command prompt?
    a. **[CTRL-C]**
    b. **[CTRL-D]**
    c. **[CTRL-U]**
    d. **[CTRL-R]**
    e. **[CTRL-L]**

20. What is the output of this shell command line in an empty directory?
    echo *
    a. **.**
    b. no output
    c. **..**
    d. *
    e. **. ..**

21. If file **twenty** contains twenty lines, and file **thirty** contains thirty lines, then how many lines are output by this command: **tail thirty | cat twenty**
    a. **20**
    b. **50**
    c. **30**
    d. no lines (no output)
    e. **21**

22. If I am in my home directory named **/home/ian** and **mt** is an empty sub-directory, what is true after this command line:
```
who >../ian/cat ; cp ./mt/../cat ./mt/../dog
```
a. the command fails because the path **./mt/../cat** does not exist
b. the directory **mt** now has a file named **dog** in it
c. there is a second copy of the file named **who** in the file **dog**
d. the directory **mt** now contains two files
e. the directory **mt** is still empty

23. What is in the file **x** after this command sequence:
```
echo foo >a ; rm b ; echo bar >>b ; cp a b >x
```
a. no such file (nonexistent)
b. **foo**
c. **foo** followed by **bar**
d. **bar**
e. nothing - empty file - no data

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
```
a. **foo** and **bar** each have three names (six names total)
b. **foo** and **bar** are names for different files
c. **foo** and **bar** are two of three names for this file
d. this output is not possible
e. **foo** and **bar** are names for the same file

25. If you type the command **head**
which of the following key sequences will send an EOF and take you immediately back to the command prompt?
a. **[CTRL-D]**
b. **[CTRL-U]**
c. **[CTRL-C]**
d. **[CTRL-R]**
e. **[CTRL-L]**

26. 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. **50**
c. **80**
d. **30**
e. no lines (empty file)

27. Which of the following shell command lines displays only the names in the current directory that are exactly three alphabetic letters long?
a. **echo [0-3][0-3][0-3]**
b. **echo [a-zA-Z][a-zA-Z][a-zA-Z]**
c. **echo ***
d. **echo [?][?][?]**
e. **echo ???**

28. 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
```
a. The number 123 is the size in bytes of this directory.
b. The number 123 is the count of links (names) this directory has.
c. The number 456 is the octal permissions of this directory.
d. The number 456 is the inode number of this directory.
e. The number 456 is the size of this directory.

29. 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. no output
c. **foo/.11 foo/.12 foo/...**
d. **foo/.11 foo/.12**
e. **foo/...**

30. Which command line below does not show any lines from inside the file **bat**?
a. **more bat**
b. **less bat**
c. **ls bat**
d. **tail bat**
e. **head bat**

31. What text is output by this **bash** shell command sequence:
```
echo cow >foo ; echo dog | head -1 foo
```
a. **cow** followed by **dog**
b. **dog** followed by **cow**
c. **dog**
d. **foo**
e. **cow**

32. Which of these command sequences will make file **foo** contain all of the content of file **a** followed by all of the content of file **b**?
a. **cat a >foo ; cat b >>foo**
b. **cp a b >foo**
c. **echo a b >foo**
d. **cp a >foo ; cp b >>foo**
e. **mv a b >foo**

33. Which command sequence below outputs only lines 10-15 of the Unix password file?
a. **head -15 /etc/passwd | tail -5 /etc/passwd**
b. **tail -10 /etc/passwd | head -15 /etc/passwd**
c. **tail -15 /etc/passwd | head -10**
d. **head -10 /etc/passwd | tail -15 /etc/passwd**
e. **head -15 /etc/passwd | tail -6**

34. Which command sequence below outputs only lines 11-15 of the 99-line file named **cat**?
    a. **tail -15 cat | head -10**
    b. **head -15 cat | tail -5 cat**
    c. **tail -10 cat | head -15 cat**
    d. **head -15 cat | tail -5**
    e. **head -10 cat | tail -15 cat**

35. 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. **rm -r ?abc**
    d. **rm ""?abc""**
    e. **rm /?abc**

36. 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?
    a. **[CTRL-D]**
    b. **[CTRL-C]**
    c. **[CTRL-R]**
    d. **[CTRL-L]**
    e. **[CTRL-U]**

37. 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
    a. this output is not possible
    b. **foo** and **bar** are names for different files
    c. **foo** and **bar** are two of three names for this file
    d. **foo** and **bar** are names for the same file
    e. **foo** and **bar** each have three names (six names total)

38. Which of these statements is true?
    a. Only single quotes are strong enough to stop shell glob (wildcard) patterns from expanding.
    b. If **/y** is an empty directory, **echo /y/*** produces an error message.
    c. Only double quotes are strong enough to stop shell glob (wildcard) patterns from expanding.
    d. Only backslashes are strong enough to stop shell glob (wildcard) patterns from expanding.
    e. If **/x** is an empty directory, **sort /x/*** produces an error message.

39. Which command sequence outputs inode/filename pairs for names in the current directory, sorted by inode number?
    a. **ls -node * > sort -n**
    b. **ls -i * > sort**
    c. **ls -ia | sort -n**
    d. **ls ./* | sort -node**
    e. **sort ls -ia**

40. Given an existing file of yours named **/a/x**, what is the output of this sequence of three shell commands:
    echo hi >/a/x ; sort /a/x >/a/x ; wc /a/x
    a. **2 2 4 /a/x**
    b. **1 1 2 /a/x**
    c. no output
    d. **1 1 3 /a/x**
    e. **0 0 0 /a/x**

41. In an empty directory, how many arguments are passed to the **cat** command in this **bash** command line? **date >a1 ; touch a2 ba ca ; cat a***
    a. **2**
    b. **3**
    c. **1**
    d. none
    e. **4**

42. Which of these command sequences will make **file3** contain all of the content of **file1** followed by all of the content of **file2**?
    a. **cat file1 file2 >file3**
    b. **cp file1 file2 >file3**
    c. **cp file1 >file3 file2 >file3**
    d. **echo file1 file2 >file3**
    e. **mv file1 file2 >file3**

43. Which command line below does not show any lines from inside the file **dog**?
    a. **tail -8 dog**
    b. **ls dog**
    c. **head -3 dog**
    d. **less dog**
    e. **sort -r dog**

44. 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
    a. The number 256 is the octal permissions of this directory.
    b. The number 512 is the size of this directory.
    c. The number 256 is the inode number of this directory.
    d. The number 256 is the size of this directory.
    e. The number 512 is the count of links (names) this directory has.

45. What command shows all the lines in file **foo** that contain the string **bar**?
    a. **grep bar foo**
    b. **grep foo bar**
    c. **cat foo > grep bar**
    d. **grep bar >foo**
    e. **grep cat foo bar**

46. Which command sequence below does *not* generate an error message from the last command in the sequence?
    a. **mkdir one one/two ; rmdir one/two**
    b. **mkdir foo foo/bar ; rmdir foo**
    c. **mkdir foo ; sleep foo**
    d. **date >foo ; cp foo/. bar**
    e. **cat /etc/passwd > mail idallen@ncf.ca**

47. If file **foo** contains nine 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 | cat | tail -5 | head -1
    a. **5**
    b. **9**
    c. **7**
    d. **6**
    e. **8**

48. What is the output of this shell command line in an empty directory? **ls ***
    a. no output
    b. **. ..**
    c. *****
    d. **.**
    e. an error message from **ls** saying ***** does not exist

49. Given this long listing:
    drwxr-xr-x 448 me me 296 Dec 4 9:12 /dir
    How many subdirectories lie immediately under **/dir**?
    a. 448
    b. 296
    c. there is not enough information shown to answer the question
    d. 446
    e. 294

50. What appears on your screen after this bash shell command line?
    echo hi >a ; ls a > wc
    a. **2**
    b. no output
    c. **1 1 2**
    d. **3**
    e. **1 1 3**

51. If file **/a** contains 20 lines, and file **/b** contains 30 lines, then how many lines are in file **/c** after this sequence of shell commands:
    sort /a /b >/c ; cat /a >>/b ; sort /c /b /a >/c
    a. **120**
    b. **50**
    c. no lines (empty file)
    d. **80**
    e. **70**

52. What is the output of this shell command line in an empty directory?
    echo *
    a. *****
    b. no output
    c. an error message from **echo** saying ***** does not exist
    d. **.**
    e. **. ..**

53. What is in file **cow** after running this **bash** shell command line?
    echo one two >cow three
    a. **one two**
    b. **one two cow three**
    c. no output (empty file)
    d. **one two three**
    e. **echo one two**

54. Which command below removes *only* this five-character file name containing a special character (and no others): **date?**
    a. **rm date***
    b. **rm date\\?**
    c. **rm ./date\?**
    d. **rm ./date?**
    e. **rm date/?**

55. Select the correct **bash** shell order of command line processing:
    a. redirection, quotes, globs, variables
    b. quotes, variables, globs, redirection
    c. quotes, globs, variables, redirection
    d. quotes, redirection, variables, globs
    e. quotes, variables, redirection, globs

56. How can you ask the **bash** (Linux) shell to complete commands or file names for you?
    a. You can type the first part of the command or file name and press the **ALT** key.
    b. Type **[ALT]-[F2]** the shell will present a menu of commands.
    c. Type **[CONTROL]-[ALT]-[DEL]** and the shell will present a menu of commands.
    d. You can type the first part of the command or file name and press the **TAB** key.
    e. Type **[CONTROL]-[D]** and the shell will present a menu of commands.

57. In the output of the command **`ls -ai`**, the one-character name **`.`** signifies what?
    a. A name with an unprintable character.
    b. A name that is hidden.
    c. A current file.
    d. The parent directory.
    e. The current directory.

58. Which of the following shell command lines displays all the names in the current directory that are exactly three digits long (and no others)?
    a. **`echo ???`**
    b. **`echo [?][?][?]`**
    c. **`echo [1-3][1-3][1-3]`**
    d. **`echo [0-9][0-9][0-9]`**
    e. **`echo [3][3][3]`**

59. Which command line lists all possible utilities available for compiling programs?
    a. **`man * | grep compile`**
    b. **`grep compile /etc/*`**
    c. **`grep /etc/* compile`**
    d. **`man compile`**
    e. **`apropos compile`**

60. In an empty directory, what is the length of the longest file name created by the following sequence: **`var='a ab abc abcd abcde' ; touch '$var'`**
    a. 15 characters
    b. 4 characters
    c. 3 characters
    d. 5 characters
    e. 19 characters

61. In an empty directory, how many words are in file **`out`** after this **`bash`** shell command line? **`touch 1 2 3 2 1 ; ls >out`**
    a. **`5`**
    b. **`3`**
    c. no output (empty file)
    d. **`4`**
    e. **`6`**

62. Which command line displays the contents of the Unix **`passwd`** file one page at a time?
    a. **`/etc/passwd >less`**
    b. **`less | /etc/passwd`**
    c. **`/etc/passwd | less`**
    d. **`less </etc/passwd`**
    e. **`cat /etc/passwd >less`**

63. How many arguments are passed to the command by the shell on this command line: **`<bar bar -b "-a" '-r' >bar bar bar`**
    a. **`5`**
    b. **`3`**
    c. **`6`**
    d. **`4`**
    e. **`7`**

64. Which Unix command sequence deletes a directory and everything inside it?
    a. **`rm -all dir`**
    b. **`rmdir -r dir`**
    c. **`deltree -all dir`**
    d. **`rmdir -all dir`**
    e. **`rm -r dir`**

65. How many arguments and options are there to the command:
    `ls -li foobar`
    a. Two options, no arguments.
    b. Two arguments, no options.
    c. Two arguments, one of which is a single option and the other is a pathname.
    d. Two command line arguments, one of which contains two bundled options.
    e. One argument, no options.

66. What is the output of this successful command sequence?
    `cd /home/foo ; touch dir ; mkdir bar ; pwd`
    a. **`/home/foo/dir`**
    b. **`/home/foo/dir/bar`**
    c. **`/bar`**
    d. **`/home/foo/bar`**
    e. **`/home/foo`**

67. Which of these command sequences will make file **`out`** contain all of the content of file **`in1`** followed by all of the content of file **`in2`**?
    a. **`echo in1 in2 >out`**
    b. **`mv in1 in2 >out`**
    c. **`cat in1 in2 >out`**
    d. **`cp  in1 >out  in2 >out`**
    e. **`cp in1 in2 >out`**

68. Which command sequence below outputs only lines 10-15 of the 16-line file named **`hex`**?
    a. **`tail -16 hex | head -10`**
    b. **`tail -10 hex | head -16 hex`**
    c. **`head -15 hex | tail -6`**
    d. **`head -16 hex | tail -5 hex`**
    e. **`head -10 hex | tail -15 hex`**

69. Which of the command lines below can generate a non-empty file?
    a. **`tail -5 /a/b >/a/b`**
    b. **`cat /a/b >/a/b`**
    c. **`sort -r /a/b >/a/b`**
    d. **`ls -i /a/b >/a/b`**
    e. **`grep /a/b /a/b >/a/b`**

70. How many lines are in the file **`out`** after this command sequence:
    `echo hi >x ; echo ho >>x ; cat x x x >out`
    a. **6**
    b. **2**
    c. nothing - empty file - no data
    d. **3**
    e. **1**

71. What is the output of this successful command sequence?
    `cd /tmp ; mkdir foo ; mkdir bar ; pwd`
    a. **/bar**
    b. **/tmp/foo/bar**
    c. **/tmp**
    d. **/tmp/foo**
    e. **/tmp/bar**

72. Which of the command lines below can generate a non-empty file?
    a. **`wc -wc file >file`**
    b. **`cat file file file >file`**
    c. **`tail -3 file >file`**
    d. **`head -5 file >file`**
    e. **`sort -r file >file`**

73. How many arguments and options are there to the command:
    `ls -ls /cat`
    a. Two command line arguments, one of which contains two bundled options.
    b. Two arguments, one of which is a single option and the other is a pathname.
    c. Two arguments, no options.
    d. A three-letter file name and a **`/cat`** switch option argument.
    e. Two options, no arguments.

74. What is the output on your screen of this command sequence:
    `echo dog >one ; echo cow | head -2 one`
    a. **cow** followed by **dog**
    b. **dog** followed by **cow**
    c. **cow**
    d. an error message
    e. **dog**

75. 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. 1
    e. 2

76. What would you see if you typed this command: **`cat /users`**
    a. The contents of your subdirectory named **users**
    b. The contents of the file **users** located in the root directory
    c. The contents of the file **users** located in the parent directory
    d. The contents of the file **users** located in your home directory
    e. The contents of your directory named **users**

77. If directory **`/a`** contains these seven two-character file names: **aa**, **ab**, **ac**, **ad**, **a?**, **a***, **a.**, then which shell command below will remove only the single name **a?** from the directory?
    a. **`rm /a/a\?`**
    b. **`rm /a/a[*]`**
    c. **`rm /a/a*`**
    d. **`rm /a?`**
    e. **`rm /a/a?`**

78. Which one of the following commands will leave **`file1`** non-empty?
    a. **`wc file1 > file1`**
    b. **`head file1 > file1`**
    c. **`tail file1 > file1`**
    d. **`cat file1 > file1`**
    e. **`sort file1 > file1`**

79. Which command below removes *only* this four-character file name containing a special character (and no others): **`*dog`**
    a. **`rm \\*dog`**
    b. **`rm .\/*dog`**
    c. **`rm /*dog`**
    d. **`rm ./\*dog`**
    e. **`rm ?dog`**

80. 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 command fails because the path **`x/./fil`** does not exist
    b. the directory **`x`** now contains only a file named **`y`**
    c. the command fails because the path **`x/../../me`** does not exist
    d. there is a second copy of the file **`fil`** in the file named **`y`**
    e. the directory **`x`** is still empty

81. How many command arguments does the shell pass to this **echo** command:
```
echo 'It's a bird! It's a plane!'
```
a. Three arguments.
b. One argument.
c. Four arguments.
d. Two arguments.
e. Five arguments.

82. If you type the command **sleep 60**
which of the following key sequences will interrupt it and take you immediately back to the command prompt?
a. **[CTRL-C]**
b. **[CTRL-L]**
c. **[CTRL-U]**
d. **[CTRL-D]**
e. **[CTRL-R]**

83. If directory **dir** contains only these five two-character file names: **a?**, **11**, **?1**, **1***, **.1**, then which shell command below will remove *only* the single two-character name **?1** from the directory?
a. **rm dir/??**
b. **rm dir/\??**
c. **rm dir/*1**
d. **rm dir/?1**
e. **rm dir/1***

84. Which of the following VI/VIM key sequences will move the entire line on which the cursor resides to after the line that follows it (i.e. it would move line 5 to be line 6 and line 6 would become line 5)?
a. **:dp**
b. **ddp**
c. **DDp**
d. **DDP**
e. **ddP**

85. If file **/a/b** contains ninety-nine lines, each of which is the two-digit line number of the line in the file (**01** through **99**), what is the output of this command:
```
sort /a/b /a/b | tail -4 | head -1
```
a. **98**
b. **01 01**
c. **04 04**
d. **96**
e. **96 96**

86. If you type the command **sort verybigfile >out**
which of the following key sequences will interrupt it and take you immediately back to the command prompt?
a. **[CTRL-D]**
b. **[CTRL-C]**
c. **[CTRL-L]**
d. **[CTRL-R]**
e. **[CTRL-U]**

87. How many lines are in file **out** after this bash shell command line?
```
echo hi >dog >cat >out
```
a. **3**
b. **1**
c. no output (empty file)
d. no such file (file does not exist)
e. **2**

88. 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/../..**

89. If my current directory is **/bin**, which of these pathnames is equivalent to the file name **/bin/ls**?
a. **/root/bin/ls**
b. **./bin/ls**
c. **ls/.**
d. **../../bin/ls**
e. **../bin/ls/.**

90. What is the output of this sequence of three shell commands:
```
echo hi >wc ; ls wc >wc ; wc wc
```
a. **1 1 2 wc**
b. **2 2 4 wc**
c. no output
d. **1 1 3 wc**
e. **0 0 0 wc**

91. Which command below is the best way to find a line containing an asterisk (*****) in the file named **foo**?
a. **grep * foo**
b. **grep foo [*]**
c. **grep ./* foo**
d. **grep '*' foo**
e. **grep foo "*"**

92. Which of these statements is true?
    a. You can only login to Unix once per userid; you cannot be logged in to the same machine twice.
    b. Unix commands can be entered in upper-case or lower-case letters; they are equivalent.
    c. Unix commands must be entered in lower-case letters.
    d. To erase an entire line of typing, type [CONTROL]-[E].
    e. To indicate End-of-File (no more input), type [CONTROL]-[E].

93. How many arguments does the shell pass to this **echo** command:
```
echo " one '2 three' 4 "five 6 ' 7 "8 ' >out
```
    a. Six arguments.
    b. Four arguments.
    c. Three arguments.
    d. Five arguments.
    e. Two arguments.

94. Which of these statements is true?
    a. The **file** command creates a new, empty file in the current directory
    b. To interrupt a Unix process from the keyboard, type **[CONTROL]-[D]**.
    c. To telnet to ACADUNIX from outside the College, use the name **acadunix.algonquin**.
    d. To erase an entire line of typing, type **[ALT]-[DELETE]**.
    e. To indicate End-of-File (no more input) to a program, type **[CONTROL]-[D]**.

95. What appears on your screen after this bash shell command line?
```
echo hi >out ; wc -c out
```
    a. no output
    b. **4 out**
    c. **5 out**
    d. **3 out**
    e. **2 out**

96. When doing an **ls -a**, the output pathname that is a double dot (**..**) signifies what?
    a. A hidden file.
    b. A file or directory with double links.
    c. The parent directory.
    d. The root directory.
    e. The current directory.

97. What is true about this bash shell command line?
```
date >ls ; ls -ls ls >wc
```
    a. The **wc** command counts the output of the **ls** command.
    b. The shell finds and executes three different commands.
    c. The **ls** command receives the output of **date** on standard input.
    d. The file **wc** has one line in it.
    e. The **ls** command is executed more than once.

98. How many arguments and options are there to the command:
```
wc -wc /sort
```
    a. Two command line arguments, one of which contains two bundled options.
    b. A three-letter file name and a **/sort** switch option argument.
    c. Two arguments, one of which is a single option and the other is a pathname.
    d. Two options, no arguments.
    e. Two arguments, no options.

99. What can you do to get back (redo) the last command you typed to the **bash** (Linux) shell?
    a. Use the "UpArrow" key.
    b. Use the "PageUp" key.
    c. Type [CONTROL]-[ALT]-[UP]
    d. Type [ALT]-[F2]
    e. Type [CONTROL]-[BACKSPACE]

100. 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
```
    a. the command fails because the path **sub/../fil** does not exist
    b. the command fails because the path **../myhome/cat** does not exist
    c. the directory **sub/..** now has a file named **cat** in it
    d. the directory **sub** now contains only a file named **cat**
    e. there is a second copy of the file **fil** in the file named **cat**

101. How many arguments and options are there to the command:
```
ls -al /etc
```
    a. Two arguments, no options.
    b. A three-letter file name and an **/etc** switch option.
    c. Two options, no arguments.
    d. Two arguments, one of which is a single option and the other is a pathname.
    e. Two command line arguments, one of which contains two bundled options.

102. If my current directory is **/home**, which of these pathnames is equivalent to the pathname **/home/a/b/c**?
    a. **../a/b/c**
    b. **../home/b/c**
    c. **/a/b/c**
    d. **./a/b/c**
    e. **./home/a/b/c**

103. What is the link count of directory **dir** after this set of successful commands?
```
mkdir a ; mkdir a/b ; mkdir a/c ; mkdir a/b/c
```
    a. 5
    b. 1
    c. 3
    d. 4
    e. 2

104. Which command below removes *only* this five-character file name containing a special character (and no others): **yy?yy**
    a. **rm yy\?yy**
    b. **rm yy/?yy**
    c. **rm yy\\?yy**
    d. **rm yy?yy**
    e. **rm yy//?yy**

105. 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. there is a second copy of the file **single** in the file named **double**
    c. the directory **foo** is now empty
    d. the directory **foo** now contains only a file named **double**
    e. the command fails because the name **foo/../double** does not exist

106. 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
    a. The number 123 is the size of this directory.
    b. The number 123 is the octal permissions of this directory.
    c. The number 456 is the size of this directory.
    d. The number 123 is the inode number of this directory.
    e. The number 456 is the count of links (names) this directory has.

107. What is the resulting link count of empty directory **dir** after this set of successful commands? **cd dir ; touch foo ; ln foo one ; ln foo two**
    a. 2
    b. 4
    c. 3
    d. 1
    e. 5

108. How many lines are in file **out** after this bash shell command line?
    echo hi >dog >out >cat
    a. no output (empty file)
    b. **1**
    c. **3**
    d. **2**
    e. no such file (file does not exist)

109. If file **nine** contains nine 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 -4 | head -1
    a. **6**
    b. **1 1**
    c. **6 6**
    d. **8**
    e. **4 4**

110. What is in file **out** after running this **bash** shell command line?
    echo 2 3 >out 3 0
    a. **2 3**
    b. **2 3 3 0**
    c. **2 3 0**
    d. **2 3 >out 3 0**
    e. no output (empty file)

111. How many arguments does the shell pass to this **echo** command:
    echo 'And it's not hard, it's just logical.'
    a. Six arguments.
    b. Seven arguments.
    c. Three arguments.
    d. Four arguments.
    e. Five arguments.

112. What is the output on your screen of the following command sequence if run in a directory containing 123 files with names that are all the numbers from **1** to **123** inclusive: **glob="*" ; echo "$glob"**
    a. *****
    b. **$glob**
    c. **"$glob"**
    d. the file names **1** through **123**, surrounded by quotes
    e. the file names **1** through **123**

113. What appears on your screen after this bash shell command line?
    mkdir foo ; rmdir foo | wc -c
    a. **3**
    b. **0**
    c. **1**
    d. no output
    e. **4**

114. If file **/a** contains 40 lines, and file **/b** contains 60 lines, then how many lines are output by this command: **sort /a /b | cat /a | cat /b**
    a. **40**
    b. **100**
    c. **160**
    d. **200**
    e. **60**

115. What is the output of this command sequence:
    echo bat >one ; echo sky | head -2 one
    a. **bat**
    b. **sky** followed by **bat**
    c. **bat** followed by **sky**
    d. an error message
    e. **sky**

116. 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. Two arguments.
c. Three arguments.
d. One argument.
e. Five arguments.

117. What will appear on your screen if you execute this sequence of commands in your home directory:
```
ln /etc/passwd foo ; ln foo bar
echo hi >bar ; cat bar
```
a. the conents of the password file followed by **hi**
b. an error message and then **hi**
c. an error message and then the contents of the password file
d. **hi**
e. **bar**

118. In the output of the command **ls -a**, a dot that begins a name signifies what?
a. The current directory.
b. The parent directory.
c. A name with an unprintable character.
d. A current file.
e. A name that is hidden.

119. How many arguments does the shell pass to this **echo** command:
```
echo " 1 2 " three ' 4 ' five"6"
```
a. Nine arguments.
b. Four arguments.
c. One argument.
d. Five arguments.
e. Three arguments.

120. If **/bin/bash** is a file name, which of the following pathnames always leads to the same file?
a. **/bin/bash/.**
b. **/bin/../bash**
c. **/bin/bin/../bash**
d. **./bin/bash**
e. **/bin/../bin/bash**

121. Which command line lists all possible utilities available for sorting files?
a. **man sort**
b. **grep /etc/passwd sort**
c. **man -k sort**
d. **man | grep sort**
e. **grep sort /etc/passwd**

122. How many arguments are passed to the command by the shell on this command line: **<cow cow "-x "-y '-z' >cow cow**
a. **4**
b. **6**
c. **5**
d. **7**
e. **3**

123. What will appear on your screen if you execute this sequence of commands:
```
echo 1 >x ; ln x y ; echo 2 >y ; chmod 077 y ; cat x
```
a. **1**
b. **2**
c. no output on screen
d. **1** followed by **2**
e. an error message

124. If file **ten** contains ten lines, and file **twenty** contains twenty lines, then how many lines are output by this command: **cat twenty | sort ten**
a. **10**
b. **60**
c. **30**
d. no lines (no output)
e. **20**

125. What text is output by this **bash** shell command sequence:
```
echo dog >out ; echo cat | sort out
```
a. **cat**
b. **out**
c. **cat** followed by **dog**
d. **dog**
e. **dog** followed by **cat**

126. What appears on your screen after this **bash** shell command line?
```
echo hi >ls ; cat ls > wc
```
a. **1 1 3**
b. **ls**
c. **hi**
d. **1 1 2**
e. no output

127. If **cow** is a sub-directory that contains only the file **dog**, what happens after this command: **mv cow/dog cow/./cat**
a. the directory **cow** now contains only a file named **cat**
b. the command fails because the name **cow/./cat** does not exist
c. there is a second copy of the file **dog** in the file named **cat**
d. the command fails because the name **cat** does not exist
e. the directory **cow** is now empty

128. Which of the command lines below can generate a non-empty file?
   a. **sort -r file file >file**
   b. **ls -ls file >file**
   c. **grep pattern file >file**
   d. **touch file >file**
   e. **head -1 file >file**

129. In an empty directory, what is the length of the longest file name created by the following two-command sequence:
```
var='a ab abc abcd abcde' ; touch $var
```
   a. 19 characters
   b. 3 characters
   c. 5 characters
   d. 4 characters
   e. 15 characters

130. What is the output on your screen of the following sequence of commands:
```
echo hi >wc ; wc wc >hi ; cat hi
```
   a. no output
   b. **hi**
   c. **0 0 0 wc**
   d. **1 1 3 wc**
   e. **1 1 2 wc**

131. What is in file **out** after running this bash shell command line?
```
echo a >out b c
```
   a. **b c**
   b. **echo a**
   c. **a**
   d. no output
   e. **a b c**

132. If **/bin/bash** is a file name, which of the following pathnames always leads to the same file?
   a. **/bin/bash/..**
   b. **/../../bin/bash**
   c. **/bin/../bash**
   d. **./bin/bash**
   e. **/bin/bash/.**

133. 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
```
   a. this output is not possible
   b. **foo** and **bar** are names for different files
   c. **foo** and **bar** each have three names (six names total)
   d. **foo** and **bar** are names for the same file
   e. **foo** and **bar** are two of three names for this file

134. In an empty directory, how many arguments are passed to the **rm** command in this **bash** command line? **date >a1 ; touch a2 ba ca >all ; rm a***
   a. **1**
   b. **2**
   c. **4**
   d. none
   e. **3**

135. If my current working directory is **/home**, and my home directory is **/home/me**, which of the of the following commands copies the Unix password file into my home directory under the name **foo**?
   a. **cp ./me/../etc/passwd ../home/me/foo**
   b. **cp ../home/me/../etc/passwd ./me/./foo**
   c. **cp ../../etc/passwd /me/foo**
   d. **cp me/../../etc/passwd me/foo**
   e. **cp ../etc/passwd ../me/foo**

136. 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. you cannot execute the given commands; no file will be created
   b. the file is owned by **passwd**
   c. you own the file **bar**
   d. the file is owned by **root**
   e. the file is owned by **home**

137. What appears on your screen after this bash shell command line?
```
echo hi >a ; echo a | wc -c
```
   a. **4**
   b. **3**
   c. no output
   d. **1**
   e. **2**

138. Which command sequence outputs inode/filename pairs for names in the current directory, sorted by inode number?
   a. **sort -n | ls -ai**
   b. **ls -node * > sort -n**
   c. **ls -ai | sort -n**
   d. **ls ./* | sort -node**
   e. **ls -i * > sort -n**

139. Which command line below does not show any lines from inside the file **out**?
   a. **wc out**
   b. **sort -n out**
   c. **head -99 out**
   d. **tail out**
   e. **more out**

140. 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**?
    a. **cp ../../etc/passwd /xx/foo**
    b. **cp ../home/xx/../etc/passwd ./xx/./foo**
    c. **cp xx/../../etc/passwd xx/foo**
    d. **cp xx/../etc/passwd ../home/xx/foo**
    e. **cp ../etc/passwd ../xx/foo**

141. How can you ask the **bash** (Linux) shell to complete commands or file names for you?
    a. Type **[CONTROL]-[D]** and the shell will present a menu of commands.
    b. Push key **F1** and the system will present a menu of commands.
    c. You can type the first part of the command or file name and press the **TAB** key.
    d. You can type the first part of the command or file name and press the **ALT** key.
    e. Type **[CONTROL]-[C]** and the shell will present a menu of commands.

142. In an empty directory, how many words are in file **out** after this bash shell command line? **touch a ; ls >out**
    a. **2**
    b. **4**
    c. no output (empty file)
    d. **3**
    e. **1**

143. How many arguments are passed to the command by the shell on this command line: **<pig pig -x " " -z -r" " >pig pig pig**
    a. **9**
    b. **7**
    c. **5**
    d. **6**
    e. **8**

144. Which of the command lines below can generate a non-empty file?
    a. **cat /a/b /a/b /a/b >/a/b**
    b. **tail /a/b >/a/b**
    c. **head -5 /a/b >/a/b**
    d. **sort /a/b >/a/b**
    e. **wc -l /a/b >/a/b**

145. Given an existing file of yours named **wc**, what is the output of this sequence of three shell commands: **echo hi >wc ; sort wc >wc ; cat wc**
    a. no output
    b. **1 1 2 wc**
    c. **0 0 0 wc**
    d. **2 2 4 wc**
    e. **1 1 3 wc**

146. In an empty directory, what is the shell output of these three commands:
touch xx .x xy .y xz ; a='x* y*' ; echo "$a"
    a. **xx xy xz y***
    b. ***x *y**
    c. **x* y***
    d. **$a**
    e. **xx xy**

147. How many arguments and options are there to the command:
wc -l <infile
    a. One command line argument containing one option name.
    b. A file name starting with a dash and an **<infile** switch option argument.
    c. Two arguments, neither of which is an option.
    d. Three arguments, one of which contains an option and one is a pathname.
    e. Two arguments, one of which is a single option name and the other is a pathname.

148. 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?
    a. **[CTRL-R]**
    b. **[CTRL-U]**
    c. **[CTRL-C]**
    d. **[CTRL-D]**
    e. **[CTRL-L]**

149. If directory **/a** contains these seven two-character file names: **aa**, **ab**, **ac**, **ad**, **a?**, **a***, **a.**, then which shell command below will remove only the single name **a*** from the directory (and no others)?
    a. **rm /a/a***
    b. **rm /a/a?**
    c. **rm /a***
    d. **rm /a/***
    e. **rm /a/a***

150. How many arguments are passed to the command by the shell on this command line: **<bat bat -b "-a -r" >bat bat bat**
    a. **7**
    b. **5**
    c. **4**
    d. **6**
    e. **3**

151. 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. 4
    b. 5
    c. 2
    d. 3
    e. 1

152. 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–U]**
   b. **[CTRL–L]**
   c. **[CTRL–D]**
   d. **[CTRL–C]**
   e. **[CTRL–R]**

153. Which command below is the best way to find a line containing a question mark (**?**) in the file **/etc/passwd**?
   a. **grep '?' /etc/passwd**
   b. **grep /etc/passwd ./?**
   c. **grep ? >/etc/passwd**
   d. **grep ./? /etc/passwd**
   e. **grep ? /etc/passwd**

154. In an empty directory, what is the length of the longest file name created by the following shell two-command sequence:
```
var='a ab abc abcd abcde' ; touch "$var"
```
   a. 4 characters
   b. 19 characters
   c. 3 characters
   d. 5 characters
   e. 15 characters

155. In an empty directory, what appears on your screen after this bash command line?
```
touch a ; ls | wc -l
```
   a. **2**
   b. **3**
   c. **1**
   d. **0**
   e. no output

156. What is the output on your screen of the following sequence of commands:
```
echo wc >wc ; wc wc >wc ; cat wc
```
   a. **1 1 2 wc**
   b. **0 0 0 wc**
   c. no output
   d. **1 1 3 wc**
   e. **wc**

157. If file **nine** contains nine 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 nine | tail -3 | head -1
```
   a. **8**
   b. **7 7 7**
   c. **1 1 1**
   d. **9**
   e. **7**

158. 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. **0 0 0 /a/b/x**
   b. **1 1 3 /a/b/x**
   c. **1 1 2 /a/b/x**
   d. **1 1 1 /a/b/x**
   e. no output

159. 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
```
   a. The number 712 is the inode number of this directory.
   b. The number 712 is the count of links (names) this directory has.
   c. The number 512 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 size of this directory.

160. Which command below sorts *only* this five-character file name containing a special character (and no others): **xx?xx**
   a. **sort ''xx?xx''**
   b. **sort xx?xx**
   c. **sort xx/?xx**
   d. **sort "xx?xx"**
   e. **sort ""xx?xx""**

161. In an empty directory, what is the shell output of these three commands:
```
touch .1 .2 .3 11 12 ; b='.1* .2*' ; echo '$b'
```
   a. **$b**
   b. **.1 .2**
   c. **'.1* .2*'**
   d. **.1* .2***
   e. **11 .1 12 .2**

162. If file **foo** contains nine lines, each of which is the number of the line in the file, what is the output of this command:
```
cat foo foo | sort | tail -4 | head -1
```
   a. no output
   b. **4**
   c. **8**
   d. **1**
   e. **6**

163. What is in the file **out** after this command sequence:
```
echo hi >x ; echo ho >>x ; cp x y >out
```
   a. **hi**
   b. **ho**
   c. nothing - empty file - no data
   d. no such file (nonexistent)
   e. **hi** followed by **ho**

164. Which command sequence outputs inode/filename pairs for names in the working directory, sorted by inode number?
   a. **`echo –i * > sort`**
   b. **`ls –ia | sort –n`**
   c. **`echo * | sort –n`**
   d. **`ls | sort –i`**
   e. **`ls –node | sort –n`**

165. What appears on your screen after this bash shell command line?
```
echo hi >out | wc –c
```
   a. **`0`**
   b. no output
   c. **`3`**
   d. **`1`**
   e. **`2`**

166. If directory **`foo`** contains only these four three-character file names: **`.x1`**, **`.x2`**, **`.z3`**, **`.z.`**, then what is the output of the following **`bash`** shell command line:
```
echo foo/???
```
   a. **`foo/.x1 foo/.x2 foo/.z3 foo/.z.`**
   b. **`foo/.x1 foo/.x2 foo/.z3`**
   c. no output
   d. **`foo/.z.`**
   e. **`foo/???`**

167. 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/./.`**

168. 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
```
   a. 4 blocks
   b. 3 blocks
   c. 1 block
   d. 2 blocks
   e. 5 blocks

169. If I am in my home directory named **`/home/alleni`** and **`empty`** is an empty sub-directory, what is true after this command line:
```
date >./cat ; mv empty/../cat ../alleni/dog
```
   a. the command fails because the path **`empty/../cat`** does not exist
   b. the command fails because the path **`../alleni/dog`** does not exist
   c. the directory **`empty/..`** now has a file named **`dog`** in it
   d. the directory **`empty`** now contains only a file named **`dog`**
   e. there is a second copy of the file **`cat`** in the file named **`dog`**

170. If directory **`/dir`** contains these three four-character file names: **`.123`**, **`.124`**, **`.???`**, then what is the output of the following command line:
```
echo /dir/????
```
   a. **`/dir/.123 /dir/.124 /dir/.???`**
   b. **`echo: /dir/????: No such file or directory`**
   c. no output
   d. **`/dir/.123 /dir/.124`**
   e. **`/dir/????`**

171. Which command below removes *only* this four-character file name containing a special character (and no others): **`*xyz`**
   a. **`rm ''*xyz''`**
   b. **`rm *"xyz"`**
   c. **`rm ''*xyz`**
   d. **`rm *xyz`**
   e. **`rm "*xyz"`**

172. How many lines are in the file **`bar`** after this command sequence:
```
echo hi >x ; echo ho >>x ; cat x x >bar
```
   a. nothing - empty file - no data
   b. **`1`**
   c. **`2`**
   d. **`4`**
   e. **`6`**

173. What will appear on your screen after this sequence of commands:
```
echo one >x ; ln x y ; echo two >y
echo ten >x ; cat y
```
   a. **`ten`**
   b. **`one`**
   c. no output on screen
   d. **`one`** followed by **`two`** and **`ten`**
   e. **`two`**

174. If file **`foo`** contains nine 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 | cat | tail –4 | head –1
```
   a. **`6`**
   b. **`5`**
   c. **`9`**
   d. **`7`**
   e. **`8`**

175. What is the link count of directory **`dir`** after this set of successful commands?
```
mkdir dir ; mkdir dir/foo ; touch dir/bar
```
   a. 4
   b. 3
   c. 5
   d. 2
   e. 1

176. 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**
    d. **rm ./*test**
    e. **rm ./*test**

177. Which Unix command sequence deletes a directory and everything inside it?
    a. **erase dir**
    b. **rm -r dir**
    c. **rmdir -all dir**
    d. **erase -r dir**
    e. **deltree -all dir**

178. 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. **rm abc//***
    d. **rm abc***
    e. **rm abc/***

179. What appears on your screen after this sequence of commands:
```
echo one >x ; ln x y ; echo two >>y ; sort x
```
    a. **two**
    b. empty file - no output on the screen
    c. **one**
    d. **one** followed by **two**
    e. **two** followed by **one**

180. What is in the file **bar** after this command sequence:
```
echo hi >x ; echo ho >x ; mv x y >bar
```
    a. no such file (nonexistent)
    b. **ho**
    c. **hi**
    d. nothing - empty file - no data
    e. **hi** followed by **ho**

181. How many arguments does the shell pass to this **echo** command:
```
echo "cow "y " bat 'man x' " pig'a "hop' a b
```
    a. Seven arguments.
    b. Six arguments.
    c. Eleven arguments.
    d. Five arguments.
    e. Four arguments.

182. If file **a** contains twenty lines, and file **b** contains thirty lines, then how many lines are in file **out** after this sequence of **bash** shell commands:
```
cat a b >c ; head c >c ; sort a b c >out
```
    a. **50**
    b. **30**
    c. no lines (empty file)
    d. **60**
    e. **100**

183. If file **/a** contains thirty lines, and file **/b** contains fifty lines, then how many lines are in file **/c** after this sequence of shell commands:
```
cat /a /b >/c ; sort /c >/c ; sort /c /a /b >/c
```
    a. no lines (empty file)
    b. **30**
    c. **160**
    d. **50**
    e. **80**

184. What is true about this output from **ls -il foo bar**?
```
871 -r-------- 3 bin  bin  2 Apr 22 10:15 foo
872 -r-------- 3 bin  bin  2 Apr 22 10:15 bar
```
    a. **foo** and **bar** each have three names (six names total)
    b. **foo** and **bar** are names for the same file
    c. **foo** and **bar** each have two names (four names total)
    d. this output is not possible
    e. **foo** and **bar** are two of three names for this file

185. Which command line below does not show any lines from inside the file **dog**?
    a. **tail dog**
    b. **less dog**
    c. **more dog**
    d. **ls dog**
    e. **head dog**

186. What appears on your screen after this bash shell command line?
```
echo hi >a ; ls a | wc -c
```
    a. **4**
    b. **2**
    c. **1**
    d. **3**
    e. no output

187. In an empty directory, what appears on your screen after this bash command line?
```
touch a ; ls >wc -l
```
    a. **2**
    b. **1**
    c. **0**
    d. no output
    e. **3**

188. What is the output of this sequence of three shell commands:
```
echo x >abc ; ls >abc abc ; wc abc
```
a. **1 1 2 abc**
b. **1 1 4 abc**
c. no output
d. **1 1 3 abc**
e. **0 0 0 abc**

189. Which of the following statements is true about this shell command line:
```
>/a/b/c cat /a/b/d
```
a. The command **/a/b/c** sees two arguments.
b. The command is always invalid.
c. The command **/a/b/c** sees only one argument
d. The command **cat** sees only one argument.
e. The command **cat** sees two arguments.

190. How many arguments does the shell pass to this **echo** command:
```
echo ' one two ' three ' four ' 5'6'
```
a. Six arguments.
b. Five arguments.
c. One argument.
d. Four arguments.
e. Nine arguments.

191. What command can you use to remove a directory that isn't empty?
a. **rmdir –r dir**
b. **deldir –r dir**
c. **mv –r dir**
d. **rm –r dir**
e. **del –r dir**

192. If file **foo** contains nine 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 –4 | tail –1
```
a. **7**
b. **6**
c. **9**
d. **8**
e. **5**

193. What is the output of this bash shell command line in an empty directory?
```
echo '$SHELL'
```
a. **'/bin/bash'**
b. **$SHELL**
c. **/bin/bash**
d. **'$SHELL'**
e. no output

194. What is in the file named **file** after this command sequence:
```
echo a >c ; echo b >>c ; mv c d >file
```
a. no such file (nonexistent file)
b. **b**
c. **a**
d. **a** followed by **b**
e. nothing - **file** is empty - no data

195. Which command below removes *only* this four-character file name containing a special character (and no others): **cat?**
a. **rm \cat?**
b. **rm cat/?**
c. **rm ''cat?''**
d. **rm "cat?"**
e. **rm ""cat?""**

196. What is the output of this sequence of three shell commands:
```
echo hi >hi ; head hi >hi ; wc hi
```
a. no output
b. **0 0 0 hi**
c. **1 1 2 hi**
d. **1 1 3 hi**
e. **2 2 4 hi**

197. If your terminal type is **xterm,** what is the output of this **bash** shell command line? **echo '$TERM'**
a. **$TERM**
b. **xterm**
c. **'xterm'**
d. **'$TERM'**
e. no output

198. If your PATH variable contains **/bin:/usr/bin**, what is the output of this **bash** shell command line? **echo '$PATH'**
a. **$PATH**
b. **/bin:/usr/bin**
c. **/bin**
d. **'$PATH'**
e. **'/bin'**

199. Which command below removes *only* this four-character file name containing a special character (and no others): **xyz?**
a. **rm xyz\\?**
b. **rm xyz//?**
c. **rm –r xyz?**
d. **rm xyz\?**
e. **rm xyz/?**

200. If my current directory is **/etc**, which of these pathnames is equivalent to the file name **/etc/passwd**?
   a. **../passwd**
   b. **../etc/passwd/.**
   c. **./passwd**
   d. **/passwd**
   e. **./etc/passwd**

201. What appears on your screen after this bash shell command line?
```
echo hi >a ; cp a b | wc -c
```
   a. **2**
   b. no output
   c. **0**
   d. **1**
   e. **3**

202. Which of the command lines below can generate a non-empty file?
   a. **ls /out >/out**
   b. **sort -r /out >/out**
   c. **grep -v /out /out >/out**
   d. **tail -5 /out >/out**
   e. **head </out >/out**

203. What appears on your screen after this bash shell command line?
```
echo hi >a ; cat a | wc -c
```
   a. **1**
   b. **3**
   c. no output
   d. **4**
   e. **2**

This page intentionally left blank.

Answer Key - NET 2003 – Ian Allen – Winter 2005 - NET 2003 Practice Test

Office use only: 81 196 167 170 121 59 142 7 82 164 36 85 115 127 53 149 193 55 18 43 146 162 174 78 20 148 144 40 114 32 156 117 188 105 72 21 76 93 11 124 101 197 31 39 165 189 6 45 202 51 119 44 153 64 203 16 176 145 87 90 122 58 109 15 99 141 116 106 25 94 143 28 97 178 136 198 104 190 70 132 63 22 187 191 154 24 74 2 139 130 172 91 38 92 54 199 185 98 195 133 96 140 137 69 159 41 179 75 9 152 169 201 56 163 166 62 183 177 37 4 86 112 175 147 155 57 160 29 89 80 151 3 77 102 34 184 49 12 33 35 17 123 111 26 126 158 100 23 103 110 135 19 171 88 61 79 10 125 42 73 157 182 107 13 52 113 1 192 161 186 68 95 84 5 134 65 14 67 83 108 200 120 118 128 30 48 60 129 150 168 194 8 46 173 66 131 180 181 71 138 50 27 47

1. a
2. d
3. a
4. a
5. c
6. d
7. a
8. e
9. e
10. c
11. d
12. a
13. b
14. b
15. c
16. c
17. c
18. c
19. b
20. d
21. a
22. e
23. e
24. d
25. a
26. b
27. b
28. a
29. a
30. c
31. e
32. a
33. e
34. d
35. b
36. a
37. b
38. e
39. c
40. e
41. a
42. a
43. b
44. b
45. a
46. a
47. a
48. e
49. d
50. b
51. e
52. a
53. d
54. c
55. d
56. d
57. e
58. d
59. e
60. b
61. d
62. d
63. a
64. e
65. d
66. e
67. c
68. c
69. d
70. a
71. c
72. a
73. a
74. e
75. e
76. b
77. a
78. a
79. d
80. e
81. c
82. a
83. b
84. b
85. a
86. b
87. b
88. a

89. d
90. d
91. d
92. c
93. c
94. e
95. d
96. c
97. d
98. a
99. a
100. c
101. e
102. d
103. d
104. a
105. c
106. c
107. a
108. a
109. d
110. b
111. d
112. a
113. b
114. e
115. a
116. e
117. c
118. e
119. b
120. e
121. c
122. e
123. e
124. a
125. d
126. e
127. a
128. b
129. c
130. d
131. e
132. b
133. a
134. e
135. d
136. d
137. e
138. c
139. a
140. c
141. c
142. a
143. d
144. e
145. a
146. c
147. a
148. c
149. a
150. c
151. b
152. c
153. a
154. b
155. c
156. b
157. d
158. a
159. d
160. d
161. a
162. c
163. c
164. b
165. a
166. e
167. d
168. b
169. c
170. e
171. e
172. d
173. a
174. a
175. b
176. b
177. b
178. d
179. d
180. d
181. d
182. a
183. e
184. a

```
185. d                              186 187 188 189 190 191
186. b                              192 193 194 195 196 197
187. d                              198 199 200 201 202 203
188. b
  189. d                          Macro .cmd split no indent: 3
  190. d                          Macro .cmd split with indent: 93
  191. d                          Macro .ans splits: 0
  192. d
193. b
194. e
195. d
196. b
  197. a
  198. a
  199. d
  200. c
201. c
202. a
203. b

Count of a:  52  26%
Count of b:  34  17%
Count of c:  35  17%
Count of d:  47  23%
Count of e:  35  17%

With 5 choices: 203
  1 2 3 4 5 6 7 8 9 10 11 12
  13 14 15 16 17 18 19 20 21
  22 23 24 25 26 27 28 29 30
  31 32 33 34 35 36 37 38 39
  40 41 42 43 44 45 46 47 48
  49 50 51 52 53 54 55 56 57
  58 59 60 61 62 63 64 65 66
  67 68 69 70 71 72 73 74 75
  76 77 78 79 80 81 82 83 84
  85 86 87 88 89 90 91 92 93
  94 95 96 97 98 99 100 101
  102 103 104 105 106 107
  108 109 110 111 112 113
  114 115 116 117 118 119
  120 121 122 123 124 125
  126 127 128 129 130 131
  132 133 134 135 136 137
  138 139 140 141 142 143
  144 145 146 147 148 149
  150 151 152 153 154 155
  156 157 158 159 160 161
  162 163 164 165 166 167
  168 169 170 171 172 173
  174 175 176 177 178 179
  180 181 182 183 184 185
```