Evaluation: 177 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 - 177 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.

The answers to this test are in the Answer Key on the last page(s).

1. What is the output on your screen of this shell command line in an empty directory?
   `touch 1 2 3 .a .ab .abc ; echo [.]*`
   a. no output on screen
   b. **`. .. .a .ab .abc`**
   c. an error message from **`echo`** saying **`[.]*`** does not exist
   d. **`[.]*`**
   e. **`.a .ab .abc`**

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

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

4. If file **`a`** contains 20 lines, and file **`b`** contains 30 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. **`100`**
   b. no lines (empty file)
   c. **`60`**
   d. **`50`**
   e. **`30`**

5. Which command shows the name of the current computer:
   a. **`users`**
   b. **`hostname`**
   c. **`ifconfig`**
   d. **`who`**
   e. **`w`**

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

7. 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 **`TAB`** key.
   b. Type **`[CONTROL]-[C]`** and the shell will present a menu of commands.
   c. Push key **`F1`** and the system will present a menu of commands.
   d. Type **`[CONTROL]-[D]`** and the shell will present a menu of commands.
   e. You can type the first part of the command or file name and press the **`ALT`** key.

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

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

10. If my current directory is **/usr**, which of these pathnames is equivalent to the pathname **/usr/x/y/z**?
   a. **x/./y/z**
   b. **./usr/x/y/z**
   c. **/x/y/z**
   d. **../usr/y/z**
   e. **../x/y/z**

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

12. If **/etc/passwd** is a file name, which pathname always leads to the same file?
   a. **/../etc/passwd**
   b. **/etc/passwd/../..**
   c. **./etc/passwd**
   d. **/etc/passwd/.**
   e. **/etc/../../passwd**

13. 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 | tail -4 | head -1
   a. **1**
   b. **4**
   c. **8**
   d. no output on screen
   e. **6**

14. 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. **4**
   b. **2**
   c. none
   d. **1**
   e. **3**

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

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

17. 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/.**

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

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

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

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

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

23. What is the output on your screen of this shell command line in an empty directory?
    touch .1 .2 .3 4 5 6 ; echo .*
    a. **. .. .1 .2 .3**
    b. **.***
    c. an error message from **echo** saying **.*** does not exist
    d. **.1 .2 .3 4 5 6**
    e. **4 5 6**

24. 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 [0-9][0-9][0-9]**
    b. **echo ???**
    c. **echo [1-3][1-3][1-3]**
    d. **echo [?][?][?]**
    e. **echo [3][3][3]**

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

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

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

28. Which command pipeline outputs the count of the number of userids containing the string **allen** that are currently logged in?
    a. **grep allen | wc | who**
    b. **who | grep allen | wc**
    c. **grep allen | who | wc**
    d. **who | wc allen | grep**
    e. **who | grep | allen wc**

29. Which command line displays all the non-hidden names in the current directory that contain the letter **x** (and no others)?
    a. **echo ?x?**
    b. **echo x***
    c. **echo *x**
    d. **echo *x***
    e. **echo [x]**

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

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

32. If directory **cow** contains only these four three-character file names: **.AA**, **.A1**, **.BB**, **.B.**, then what is the output on your screen of this command line:
    echo cow/*
    a. **cow/***
    b. **cow/.B.**
    c. **cow/.AA cow/.A1 cow/.BB cow/.B.**
    d. no output on screen
    e. **cow/.AA cow/.A1 cow/.BB**

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

34. Which command pipeline outputs the count of the number of pathnames (including all subdirectories) that lie under the /etc directory?
    a. **man /etc ; wc**
    b. **dir /etc | count**
    c. **ls /etc ; wc**
    d. **find /etc | wc**
    e. **ls /etc | wc**

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

36. What is the output on your screen of this shell command line in an empty directory?
    touch 1 .1 23 .23 456 ; echo [12]*
    a. **[12]***
    b. **1 .1 23 .23**
    c. **1 23**
    d. an error message from **echo** saying **[ab]*** does not exist
    e. **1 .1 23 .23 456**

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

38. If file **x** contains 10 lines, and file **y** contains 20 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. no lines (empty file)
    c. **50**
    d. **45**
    e. **60**

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

40. Given an existing file of yours named **/a/b/x**, what is the output on your screen 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 3 /a/b/x**
    b. **1 1 1 /a/b/x**
    c. **1 1 2 /a/b/x**
    d. no output on screen
    e. **0 0 0 /a/b/x**

41. What is the output on your screen of this shell command line in an empty directory?
    touch x .a .ab .cde .fghi ; echo .??*
    a. **.??***
    b. an error message from **echo** saying **.??*** does not exist
    c. **.ab .cde .fghi**
    d. **. .. .a .ab .cde .fghi**
    e. **.cde .fghi**

42. What is the output on your screen of this successful command line?
    cd /home/myhome ; mkdir foo ; mkdir bar ; pwd
    a. **/home/myhome/foo**
    b. **/home/myhome**
    c. **/bar**
    d. **/home/myhome/foo/bar**
    e. **/home/myhome/bar**

43. 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. **7**
    b. **7 7 7**
    c. **1 1 1**
    d. **8**
    e. **9**

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

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

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

47. How many lines are in file **out** after this bash shell command line?
   echo hi >dog >cat >out
   a. no such file (file does not exist)
   b. nothing - empty file - no data
   c. **2**
   d. **1**
   e. **3**

48. 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. **2**
   c. **4**
   d. **1**
   e. **6**

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

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

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

52. 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. **9**
   b. **8**
   c. **7**
   d. **1 1 1**
   e. **7 7 7**

53. 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. **ddP**
   b. **DDP**
   c. **:dp**
   d. **DDp**
   e. **ddp**

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

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

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

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

58. Which command line below never shows any lines from inside the file **cow**?
   a. **wc -l cow**
   b. **head -1 cow**
   c. **tail -8 cow**
   d. **sort -r cow**
   e. **grep pattern cow**

59. 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-R]**
   e. **[CTRL-D]**

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

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

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

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

64. 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. **6**
   b. **7**
   c. **8**
   d. **5**
   e. **9**

65. 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 xx/../../etc/passwd xx/foo**
   c. **cp ../home/xx/../etc/passwd ./xx/./foo**
   d. **cp xx/../etc/passwd ../home/xx/foo**
   e. **cp ../etc/passwd ../xx/foo**

66. What command shows all the lines in file **foo** that contain the string **group**?
   a. **grep group foo**
   b. **grep group ; foo**
   c. **cat foo ; grep group**
   d. **grep foo group**
   e. **cat foo | wc group**

67. What is in file **two** after running this command line?
   echo one >two three four
   a. **one three four**
   b. **three four**
   c. **one**
   d. **echo one**
   e. empty file (no data)

68. 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. **4**
   b. **5**
   c. **6**
   d. no output (empty file)
   e. **3**

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

70. If **/bin/bash** is a file name, which pathname always leads to the same file?
   a. **./../bin/bash**
   b. **/bin/../bash**
   c. **/../bin/./bash**
   d. **/bin/bash/.**
   e. **/bin/bin/../bash**

71. 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. no output (empty file)
   d. **2 3 >out 3 0**
   e. **2 3 0**

72. 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 ../../etc/passwd /me/foo**
   b. **cp ./me/../etc/passwd ../home/me/foo**
   c. **cp ../etc/passwd ../me/foo**
   d. **cp me/../../etc/passwd me/foo**
   e. **cp ../home/me/../etc/passwd ./me/./foo**

73. Which of these commands always returns you to your account home directory?
   a. **cd**
   b. **cd /home**
   c. **cd ..**
   d. **cd /home/..**
   e. **cd home**

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

75. 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:
   cat nine nine | sort -r | head -4 | tail -1
   a. **5**
   b. **7**
   c. **9**
   d. **8**
   e. **6**

76. What is the output on your screen of this shell command line in an empty directory?
   touch .a .b .c ; echo [.]*
   a. **. .. .a .b .c**
   b. **.a .b .c**
   c. an error message from **echo** saying **[.]*** does not exist
   d. **[.]***
   e. no output on screen

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

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

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

80. If file **foo** 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 on your screen of this command: **sort -r foo foo | tail -4 | head -1**
   a. **96 96**
   b. **96**
   c. **02**
   d. **98**
   e. **04 04**

81. What is the possible output on your screen of this command line:
   echo wc >date ; sort date >date ; cat date
   a. **1 6 29 date**
   b. **1 6 28 date**
   c. **Wed Jan 26 13:00:00 EST 2005**
   d. no output on screen
   e. **wc**

82. 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−D]**
   b. **[CTRL−R]**
   c. **[CTRL−L]**
   d. **[CTRL−C]**
   e. **[CTRL−U]**

83. If **/etc/passwd** is a file name, which pathname always leads to the same file?
   a. **/etc/./etc/../passwd**
   b. **../etc/passwd**
   c. **/etc/../etc/passwd**
   d. **/etc/passwd/.**
   e. **./etc/passwd**

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

85. In an empty directory, how many arguments are passed to the **wc** command in this command line? **date >o1 ; touch a1 b2 out >o1 ; wc o***
   a. **4**
   b. **2**
   c. **1**
   d. **5**
   e. **3**

86. What appears on your screen after this bash shell command line?
echo cow | wc
   a. **3 1 1**
   b. **1 3 1**
   c. **1 1 4**
   d. **1 1 3**
   e. no output on screen

87. If **/etc/passwd** is a file name, which pathname always leads to the same file?
   a. **/etc/passwd/./.**
   b. **/./../etc/./passwd**
   c. **./ /etc/passwd**
   d. **/etc/passwd/../..**
   e. **/etc/../../passwd**

88. What is the output of this sequence of this command sequence:
echo hi >hi ; head hi >hi ; wc hi
   a. **1 1 3 hi**
   b. **1 1 2 hi**
   c. no output on screen
   d. **2 2 4 hi**
   e. **0 0 0 hi**

89. Which command line takes the list of users currently logged in to the machine and displays just the one line containing the userid that sorts first in the alphabet?
   a. **sort | who | head −1**
   b. **sort who | tail −1**
   c. **head −1 who | sort**
   d. **who | sort −r | tail −1**
   e. **head −1 sort who**

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

91. 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:
cat nine nine | tail −5 | head −1
   a. **9**
   b. **6**
   c. **8**
   d. **7**
   e. **5**

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

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

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

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

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

97. What is the output on your screen of this shell command line in an empty directory?
    touch 1 2 3 .a .b .c ; echo .??*
    a. an error message from **echo** saying **.??*** does not exist
    b. **.??***
    c. **. .. .a .b .c**
    d. **. .. 1 2 3 .a .b .c**
    e. **.a .b .c**

98. 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–L]**
    c. **[CTRL–U]**
    d. **[CTRL–C]**
    e. **[CTRL–R]**

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

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

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

102. If I am in my home directory named **/home/myhome** and **dir** is an empty sub-directory, what is true after this command line:
    touch new ; mv ./dir/../new ../myhome/old
    a. there is a second copy of the file **new** in the file named **old**
    b. the directory **dir** now contains only a file named **old**
    c. the command fails because the path **./dir/../new** does not exist
    d. the parent directory of **dir** now has a file named **old** in it
    e. the command fails because the path **../myhome/old** does not exist

103. 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. **80**
    b. **70**
    c. **120**
    d. **50**
    e. no lines (empty file)

104. 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. nothing - empty file - no data
    c. **bar**
    d. **foo** followed by **bar**
    e. **foo**

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

106. If file **x** contains 10 lines, and file **y** contains 20 lines, then how many lines are in file **cat** after this command line:
sort x y >z ; tail –5 x >x ; sort x y z >cat
a. **40**
b. **55**
c. **50**
d. no lines (empty file)
e. **60**

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

108. If file **/a** contains 30 lines, and file **/b** contains 50 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. **160**
b. **30**
c. **80**
d. **50**
e. no lines (empty file)

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

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

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

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

113. 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. **1**
c. **3**
d. **4**
e. none

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

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

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

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

118. If file **twenty** contains 20 lines, and file **thirty** contains 30 lines, then how many lines are output on your screen by this command:
    tail twenty | cat thirty
    a. **20**
    b. **30**
    c. **50**
    d. **40**
    e. no output on screen

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

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

121. What is the output on your screen of this shell command line in an empty directory?
    touch a .a bc .bc def ; echo [ab]*
    a. no output on screen
    b. **a bc**
    c. **a .a bc .bc**
    d. an error message from **echo** saying **[ab]*** does not exist
    e. **[ab]***

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

123. Which of these statements is true?
    a. To indicate End-of-File (no more input) to a program, type **[CONTROL]-[D]**.
    b. The **file** command creates a new, empty file in the current directory
    c. To interrupt a Unix process from the keyboard, type **[CONTROL]-[D]**.
    d. To erase an entire line of typing, type **[ALT]-[DELETE]**.
    e. Command **apropos** is an exact synonym for command **man**.

124. 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 ../etc/passwd ./me/foo**
    d. **cp ./me/../etc/passwd ../home/me/foo**
    e. **cp ../home/me/../etc/passwd ./me/./foo**

125. 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 -5 | head -1
    a. **1 1**
    b. **5 5**
    c. **7**
    d. **9**
    e. **1**

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

127. If file **/a** contains 30 lines, and file **/b** contains 50 lines, then how many lines are output on your screen by this command: **cat /a | sort /b**
    a. **50**
    b. **20**
    c. **30**
    d. **80**
    e. no lines (empty file)

128. What is the output on your screen 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. **sky**
    e. an error message

129. Which command sequence below outputs only lines 5-10 of the file named **foo**?
    a. **head -15 foo | tail -5**
    b. **tail -10 foo | head -6**
    c. **head -10 foo | tail -6**
    d. **head -5 foo | tail -10**
    e. **tail -15 foo | head -5**

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

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

132. 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. **mv one two >cow**
   b. **echo one two >cow**
   c. **cp one >cow two >cow**
   d. **cp one two >cow**
   e. **cat one two >cow**

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

134. 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 **TAB** key.
   b. Type **[ALT]-[F2]** the shell will present a menu of commands.
   c. Type **[CONTROL]-[D]** and the shell will present a menu of commands.
   d. Type **[CONTROL]-[ALT]-[DEL]** and the shell will present a menu of commands.
   e. You can type the first part of the command or file name and press the **ALT** key.

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

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

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

138. If **/bin/bash** is a file name, which pathname always leads to the same file?
   a. **./bin/bash**
   b. **/bin/bash/..**
   c. **/../../bin/bash**
   d. **/bin/bash/.**
   e. **/bin/../bash**

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

140. What is the output on your screen of this shell command line in an empty directory?
   touch .12 .345 .6789 ; echo .??*
   a. **. .. .12 .345 .6789**
   b. **.??***
   c. no output on screen
   d. an error message from **echo** saying **.??*** does not exist
   e. **.12 .345 .6789**

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

142. What appears on your screen after this bash shell command line?

echo hi >a ; echo a | wc -c

a. no output on screen
b. **4**
c. **2**
d. **3**
e. **1**

143. What appears on your screen after this bash shell command line?

mkdir foo ; rmdir foo | wc -c

a. **4**
b. **1**
c. no output on screen
d. **3**
e. **0**

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

echo one two three >four five

a. Three arguments.
b. Two arguments.
c. Four arguments.
d. Six arguments.
e. Five arguments.

145. What is the output on your screen of the following sequence of commands:

echo wc >wc ; wc wc >wc ; cat wc

a. **wc**
b. **0 0 0 wc**
c. **1 1 2 wc**
d. no output on screen
e. **1 1 3 wc**

146. How many lines are in file **out** after this command line?

echo hi >dog >out >cat

a. no such file (file does not exist)
b. **2**
c. **1**
d. nothing - empty file - no data
e. **3**

147. What appears on your screen after this bash shell command line?

echo hi >a ; cat a | wc -c

a. **3**
b. **2**
c. **1**
d. no output on screen
e. **4**

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

echo 1 2 3 4 >5

a. **5**
b. **4**
c. **3**
d. **6**
e. **7**

149. What appears on your screen after this command line?

mkdir xx ; rmdir xx | wc -c

a. **2**
b. **0**
c. **1**
d. **3**
e. no output on screen

150. If **/bin/bash** is a file name, which pathname always leads to the same file?

a. **/bin/bash/.**
b. **./bin/bash**
c. **/bin/bin/../bash**
d. **/bin/../bash**
e. **/bin/../bin/bash**

151. 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. empty file - no output on the screen
b. **one** followed by **two**
c. **two**
d. **two** followed by **one**
e. **one**

152. 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 **zoom** sees two arguments.
c. The command **bar** sees three arguments.
d. The command **bar** sees only two arguments
e. The command **zoom** sees three arguments.

153. What text is output by this **bash** shell command sequence:

echo cow >foo ; echo dog | head -1 foo

a. **dog** followed by **cow**
b. **cow** followed by **dog**
c. **foo**
d. **dog**
e. **cow**

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

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

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

157. 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. **8**
   c. **9**
   d. **7**
   e. **5**

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

159. Which command pipeline outputs the count of the number of manual page titles that contain the keyword "sort"?
   a. **wc man sort**
   b. **man sort | wc**
   c. **man -k sort | wc**
   d. **man sort ; wc**
   e. **wc -k sort**

160. 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. **8**
   b. **6**
   c. **9**
   d. **5**
   e. **7**

161. How do I change "foo" to "bar" on lines 25 to 30 in the **vim** editor?
   a. **:25s/foo/bar/*5**
   b. **:25-30 change "foo","bar"**
   c. **:25,30 change "foo" "bar"**
   d. **:25c foo bar *5**
   e. **:25,30s/foo/bar/**

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

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

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

165. 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. **mv in1 in2 >out**
   b. **cat in1 in2 >out**
   c. **cp in1 >out in2 >out**
   d. **cp in1 in2 >out**
   e. **echo in1 in2 >out**

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

167. 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. **cp a >foo ; cp b >>foo**
    b. **mv a b >foo**
    c. **cat a >foo ; cat b >>foo**
    d. **echo a b >foo**
    e. **cp a b >foo**

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

169. 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-L]**
    c. **[CTRL-C]**
    d. **[CTRL-U]**
    e. **[CTRL-D]**

170. 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 6**
    b. **1 1**
    c. **6**
    d. **4 4**
    e. **8**

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

172. 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. **7**
    b. **8**
    c. **5**
    d. **9**
    e. **6**

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

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

175. Which command pipeline outputs the count of the number of pathnames that lie under the current directory and recursively under all its subdirectories?
    a. **ls / | wc**
    b. **ls . | wc**
    c. **dir / | wc**
    d. **file . | wc**
    e. **find . | wc**

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

177. 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**

Answer Key - NET 2003 – Ian Allen – Winter 2007 - NET 2003 Practice Test

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



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

Count of a:  43  24%
Count of b:  29  16%
Count of c:  40  23%
Count of d:  33  19%
Count of e:  32  18%

With 5 choices: 177

Macro .cmd split no indent: 1
Macro .cmd split with indent: 97
```