Evaluation: 100 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 - 100 Questions

This is a practice test containing many practice questions. The real test will contain some questions similar to these. 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: 91 2 99 44 49 92 9 56 25 45 22 8 79 70 75 85 13 51 50 89 14 46 96 36 88 87 65 74 94 53 1 48 37 3 97 20 16 15 59 17 47 43 58 71 42 18 100 93 83 95 62 63 23 5 69 77 31 27 29 90 86 82 39 60 64 40 81 66 35 30 80 11 19 68 73 34 38 55 10 84 76 32 41 54 33 12 21 67 26 98 24 57 61 28 78 7 6 52 4 72)

1. A **Makefile** contains the following lines:
```
bar:
        rm one two
```
This means:
   a. the syntax "bar:" is not valid in a Makefile target
   b. if the user types "make two", items one and two will be removed
   c. if the user types "make one", items one and two will be removed
   d. if the user types "make bar", items one and two will be removed
   e. if the user types "make rm", items one and two will be removed

2. If variable **x** might contain nothing (a null value - defined but empty), which command sequence correctly tests for this and prints **OK**?
   a. `if [ $x -eq "" ] ; then echo OK ; fi`
   b. `if [ $x -eq : ] ; then echo OK ; fi`
   c. `if [ "$x" = * ] ; then echo OK ; fi`
   d. `if [ "$x" = "" ] ; then echo OK ; fi`
   e. `if [ ''$x'' = '''' ] ; then echo OK ; fi`

3. What is the output on your screen if a user signals an end-of-file from the keyboard during this command sequence? `read input || echo $?`
   a. **0**
   b. **1**
   c. no output on screen
   d. an error message
   e. **$?**

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

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

6. The correct **g++** compiler suffix for a C++ source file is:
   a. **.cpp**
   b. **.cplus**
   c. **.C++**
   d. **.gpp**
   e. **.g++**

7. What is the output on your screen of the following command sequence:
```
f=1 ; touch f ; test ! -z $f ; echo $?
```
   a. **1**
   b. **0**
   c. **test: $f: integer expression expected**
   d. the number 1 or 0 followed by another 1 or 0 on a new line
   e. no output

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

9. 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 "$glob"`
   a. **$glob**
   b. the file names **1** through **123**
   c. the file names **1** through **123**, surrounded by quotes
   d. *****
   e. **"$glob"**

10. 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. no output
   b. **/dir/.123 /dir/.124 /dir/.???**
   c. **/dir/.123 /dir/.124**
   d. **/dir/????**
   e. **echo: /dir/????: No such file or directory**

11. If a **bash** shell script named **sky** contains the line:
```
if [ "$1" = '$2' ] ; then echo SAME ; fi
```
then which of the following command lines will produce **SAME** as output?
a. `./sky '$2' cow`
b. `./sky "cow" 'cow'`
c. `./sky "$1" '$2'`
d. `./sky cow cow`
e. `./sky $2 $2`

12. What is the output on your screen of the following command sequence:
```
date='Friday March 12' ; test date = date
```
a. no output
b. **1**
c. **0**
d. **Fri Mar 12 10:20:39 EST 2004**
e. **test: too many arguments**

13. 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. **2**
b. **1** followed by **2**
c. **1**
d. no output on screen
e. an error message

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

15. 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. 2
c. 1
d. 5
e. 3

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

17. What is the output on your screen of the following command sequence:
```
x=1 ; y=2 ; test $x -le $y ; echo $?
```
a. no output
b. the number 0 or 1 followed by another 0 or 1 on a new line
c. **0**
d. **1**
e. **test: $x: integer expression expected**

18. If the file **bat** contained the word **foo**, what would be the output of this two command sequence:
```
PATH=/etc/passwd:/bin/ls:/bin/cat ; /bin/ls bat
```
a. **/bin/ls: bat: No such file or directory**
b. no output
c. **bat**
d. **bash: /bin/ls: command not found**
e. **foo**

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

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

21. What is the output on your screen of the following command sequence:
```
cd /etc/passwd && echo "in $(pwd)"
```
a. no output
b. **in /etc**
c. **bash: cd: /etc/passwd: Not a directory**
d. **in 0pwd)**
e. **in $(pwd)**

22. 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/?1**
b. **rm dir/\??**
c. **rm dir/??**
d. **rm dir/1***
e. **rm dir/*1**

23. In an empty directory, what is the length of the longest file name after this sequence of commands?

```
echo hi >four ; cp four five5 ; mv five5 hi ;
bzip2 hi
```

a. 2
b. 6
c. 3
d. 4
e. 5

24. How many arguments are passed to the command by the shell on this command line: **`<bat bat -b "-a -r" >bat bat bat`**

a. **3**
b. **5**
c. **2**
d. **4**
e. **6**

25. 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. 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** each have three names (six names total)
e. **foo** and **bar** are names for the same file

26. 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** each have three names (six names total)
c. **foo** and **bar** are names for the same file
d. **foo** and **bar** are two of three names for this file
e. **foo** and **bar** are names for different files

27. What is the output of this two command sequence:

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

a. **`bash: /bin/sh: No such file or directory`**
b. **`bash: /bin/ls: command not found`**
c. **`ls: /bin/head: command not found`**
d. **`head: nosuchfile: No such file or directory`**
e. **`bash: head: command not found`**

28. 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. 1
b. 4
c. 5
d. 3
e. 2

29. The default output file generated by the C and C++ compilers is named:

a. **`a.o`**
b. **`a.cpp`**
c. **`argv`**
d. **`a.out`**
e. **`a.c++`**

30. Which of these commands makes a file owned by me, also executable by me?

a. **`chmod x+u myfile`**
b. **`umask 111 myfile`**
c. **`chmod u+x ./myfile`**
d. **`chmod x=u ./myfile`**
e. **`umask 777 myfile`**

31. If **`a=1`** and **`b=1`**, which command sequence correctly compares the two numbers as equal and prints **`OK`**?

a. **`if [ $a==$b ] ; then echo OK ; fi`**
b. **`if [ a = b ] ; then echo OK ; fi`**
c. **`if test a -eq b ; then echo OK ; fi`**
d. **`if ( a == b ) ; then echo OK ; fi`**
e. **`if [ $a -eq $b ] ; then echo OK ; fi`**

32. 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 only two arguments
d. The command **`bar`** sees three arguments.
e. The command **`zoom`** sees three arguments.

33. Given my directory **`dir`** and my file **`dir/bar`** owned by me, which permissions allow me to change or create new content (data) in the file **`dir/bar`** but not delete the file?

a. Permissions **`500`** on directory **`dir`** and **`600`** on file **`dir/bar`**.
b. Permissions **`400`** on directory **`dir`** and **`400`** on file **`dir/bar`**.
c. Permissions **`100`** on directory **`dir`** and **`100`** on file **`dir/bar`**.
d. Permissions **`600`** on directory **`dir`** and **`700`** on file **`dir/bar`**.
e. Permissions **`200`** on directory **`dir`** and **`200`** on file **`dir/bar`**.

34. If **a=aaa** and **b=bbb** then what is the output on your screen of the following command sequence: **if $a = $b ; then echo $a ; fi**
    a. **bash: aaa: command not found**
    b. **test: $a: integer expression expected**
    c. no output
    d. **aaa**
    e. **test: aaa: integer expression expected**

35. Which command line copies all the files from directory **a** to directory **b**?
    a. **cd a ; tar cf /tmp/i . ; cd ../b ; tar xf /tmp/i**
    b. **cd a ; tar -rc /tmp/i . ; cd ../b ; tar -rx /tmp/i**
    c. **cd a ; tar czf /tmp/i . ; cd ../b ; tar xvf /tmp/i**
    d. **cd a ; tar -r /tmp/i . ; cd ../b ; tar -rx /tmp/i**
    e. **cd a ; tar xvf /tmp/i . ; cd ../b ; tar czf /tmp/i**

36. 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 of this command:
    cat foo foo | cat | tail -5 | head -1
    a. **6**
    b. **9**
    c. **8**
    d. **5**
    e. **7**

37. 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. 19 characters
    d. 3 characters
    e. 5 characters

38. What is the output on your screen of the following command sequence:
    cd /bin && echo "echo $(pwd)"
    a. **echo $(pwd)**
    b. no output
    c. **echo 0pwd)**
    d. **echo /bin**
    e. **/bin**

39. 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**

40. 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. 15 characters
    d. 5 characters
    e. 3 characters

41. Which of the following **bash PATH** statements makes the most sense?
    a. **PATH=/bin:/usr/bin:/etc/passwd**
    b. **PATH=/bin:/bin/cat:/usr/bin**
    c. **PATH=/bin/sh:/usr/bin:/etc:/bin**
    d. **PATH=/bin/ls:/etc:/usr/bin**
    e. **PATH=/bin:/usr/bin:/etc**

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

43. Which line below puts the count of the number of lines in the password file into the variable **foo**?
    a. **foo=[grep -c /etc/passwd]**
    b. **foo=[wc /etc/passwd | echo $1]**
    c. **foo=$(wc -l </etc/passwd)**
    d. **foo=$(cat -c /etc/passwd)**
    e. **foo=[cat -l /etc/passwd]**

44. 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. 1
    b. 5
    c. 4
    d. 2
    e. 3

45. 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. **60**
    b. **200**
    c. **100**
    d. **160**
    e. **40**

46. 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. 3 characters
b. 5 characters
c. 19 characters
d. 15 characters
e. 4 characters

47. What is the output on your screen if a user signals an end-of-file from the keyboard during this command sequence? **`read input ; echo $?`**
a. **`1`**
b. an error message
c. **`0`**
d. **`$?`**
e. no output on screen

48. The correct option to enable warning messages from the **`g++`** compiler is:
a. **`-warn`**
b. **`-wALL`**
c. **`+Warn`**
d. **`-wall`**
e. **`-Wall`**

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

50. In an empty directory, what is the length of the longest file name after this sequence of commands?
```
echo hi >sixsix ; mv sixsix four ; cp four hi ;
gzip hi
```
a. 4
b. 5
c. 2
d. 6
e. 3

51. If **`happy`** were a file of text containing 50 different lines, what would be the output of this exact command line: **`diff happy happy`**
a. an error message because **`diff`** doesn't allow the same file name twice
b. no output
c. an error message because **`diff`** only allows one file name
d. several lines, which are the lines that are different between the two files
e. the contents of file **`happy`** would be displayed

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

53. A shell script named **`bar`** is executed as follows: **`./bar 1 2 "3 4" 5`**
Inside the script is the line: **`echo "$3"`**
What is the output from this line?
a. **`"3`**
b. **`$3`**
c. **`2 3 4`**
d. **`3 4`**
e. **`1 2 3`**

54. If **`a=ant`** and **`b=bat`** then what is the output on your screen of the following command sequence: **`[ $a = ant -a $b = ant ] ; echo $?`**
a. **`1`**
b. no output
c. the number 1 or 0 followed by another 1 or 0 on a new line
d. **`0`**
e. **`test: $a: integer expression expected`**

55. What minimal permissions must you have on a directory to be able to execute successfully the command **`ls .`** from *inside* the directory?
a. **`rw-`**
b. **`r--`**
c. **`-wx`**
d. **`--x`**
e. **`r-x`**

56. 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`** followed by **`two`** and **`ten`**
c. no output on screen
d. **`two`**
e. **`one`**

57. In response to the following command line: **`read var1 var2 var3`**
which user keyboard input line below will assign the text **`three`** to the shell variable named **`var3`**?
a. **`one two three`**
b. **`var1=one var2=two var3=three`**
c. **`$var1="one" $var2="two" $var3="three"`**
d. **`one:two:three`**
e. **`one,two,three`**

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

59. what is the output on your screen of the following command sequence:
```
true && echo Linux     Rocks $?
```
a. **Linux Rocks ?**
b. **Linux Rocks 0**
c. **Linux Rocks $?**
d. no output
e. **Linux Rocks 1**

60. A **Makefile** contains the following target: **foo: bar ant**
which means:
a. item foo depends on items bar and ant
b. items bar and ant depend on item foo
c. item ant depends on items foo and bar
d. the syntax "foo:" is not valid in a Makefile target
e. items foo and bar depend on item ant

61. 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. this output is not possible
c. **foo** and **bar** are names for different files
d. **foo** and **bar** are names for the same file
e. **foo** and **bar** are two of three names for this file

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

63. Which of the following shell command lines displays all the names in the current directory that are exactly three letters (alphabetic) long (and nothing else)?
a. **echo ???**
b. **echo [a-zA-Za-zA-Za-zA-Z]**
c. **echo [a,zA,Z][a,zA,Z][a,zA,Z]**
d. **echo [a-zA-Z][a-zA-Z][a-zA-Z]**
e. **echo [azAZ][azAZ][azAZ]**

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

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

66. Which of the following shell command lines displays the names in the current directory that are exactly three numeric digits long (and nothing else)?
a. **echo [0-90-90-9]**
b. **echo [0-9][0-9][0-9]**
c. **echo [1-3][1-3][1-3]**
d. **echo [1-31-31-3]**
e. **echo ???**

67. 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. 5 blocks
b. 3 blocks
c. 2 blocks
d. 4 blocks
e. 1 block

68. 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. **0 0 0 abc**
e. **1 1 3 abc**

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

70. what is the output on your screen of the following command sequence:
```
false && echo "hello     there $?"
```
a. **hello there 0**
b. **hello there 0**
c. **hello there 1**
d. no output
e. **hello there 1**

71. Who is the owner of file **bar** after you execute this sequence of commands in your home directory:
```
ln /etc/passwd foo ; ln foo one ; ln one two ; ln two bar
```
a. the file is owned by **passwd**
b. the file is owned by **root**
c. you own the file **bar**
d. the file is owned by **home**
e. you cannot execute the given commands; no file will be created

72. What is the output on your screen of the following command sequence:
```
i=0 ; test $i = 00 ; echo $?
```
a. **1**
b. **test: $i: integer expression expected**
c. **0**
d. no output
e. the number 0 or 1 followed by another 0 or 1 on a new line

73. Which command sequence correctly searches for the **chars** and then prints **OK** if it is found inside the password file?
a. **if grep chars </etc/passwd ; then echo OK ; fi**
b. **if [grep chars /etc/passwd] ; then echo OK ; fi**
c. **if [test chars /etc/passwd] ; then echo OK ; fi**
d. **if test chars /etc/passwd ; then echo OK ; fi**
e. **if test chars = /etc/passwd ; then echo OK ; fi**

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

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

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

77. Given my directory **dir** and my file **dir/bar** owned by me, which permissions allow me to delete the file **dir/bar** from the directory, but not change the content (data) in the file?
a. Permissions **500** on directory **dir** and **400** on file **dir/bar**.
b. Permissions **300** on directory **dir** and **300** on file **dir/bar**.
c. Permissions **100** on directory **dir** and **100** on file **dir/bar**.
d. Permissions **100** on directory **dir** and **200** on file **dir/bar**.
e. Permissions **300** on directory **dir** and **500** on file **dir/bar**.

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

79. What is the output on your screen of the following command sequence:
```
a=sky ; touch $a ; test -z $a ; echo $?
```
a. no output
b. **0**
c. **test: $a: integer expression expected**
d. **1**
e. **sky**

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

81. 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. 5
b. 4
c. 2
d. 1
e. 3

82. What is the output of this sequence of three shell commands:
```
umask 762 ; touch newfile ; ls -l newfile
```
a. `------xr-x 1 me me 0 Oct 1 1:12 newfile`
b. `--------wx 1 me me 0 Oct 1 1:12 newfile`
c. `-------r-- 1 me me 0 Oct 1 1:12 newfile`
d. `-rwxrw--w- 1 me me 0 Oct 1 1:12 newfile`
e. `-rw-rw--w- 1 me me 0 Oct 1 1:12 newfile`

83. 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. **80**
c. no lines (empty file)
d. **70**
e. **50**

84. Which of these first lines will cause this executable file to be interpreted using the Bash shell?
a. **/bin/bash -u**
b. **#!/bin/bash**
c. **#/bin/bash**
d. **!#/bin/bash -u**
e. **!/bin/bash**

85. What is the output of this sequence of three shell commands:
```
umask 457 ; mkdir newdir ; ls -ld newdir
```
a. `d-w--w---- 2 me me 512 Oct 1 1:12 newdir`
b. `d-wx-w---- 2 me me 512 Oct 1 1:12 newdir`
c. `dr-xr-xrwx 2 me me 512 Oct 1 1:12 newdir`
d. `dr--r-xrwx 2 me me 512 Oct 1 1:12 newdir`
e. `d-wx-w-rwx 2 me me 512 Oct 1 1:12 newdir`

86. What is the output on your screen of the following command sequence:
```
a=1 ; b=2 ; test $a -ge $b ; echo $?
```
a. **1**
b. **test: $a: integer expression expected**
c. **0**
d. no output
e. the number 1 or 0 followed by another 1 or 0 on a new line

87. 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 of this command:
```
cat foo foo | sort -r | head -4 | tail -1
```
a. **7**
b. **9**
c. **8**
d. **5**
e. **6**

88. How can you ask the **bash** 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]-[ALT]-[DEL]** and the shell will present a menu of commands.
c. Type **[CONTROL]-[D]** 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 **ALT** key.
e. Type **[ALT]-[F2]** the shell will present a menu of commands.

89. If **bat=12** and **cat=99** then which of the following command lines outputs only the word **hi** (and nothing else)?
a. **[bat!=bat] || echo hi**
b. **[bat = bat] && echo hi**
c. **[bat -ne cat] && echo hi**
d. **[bat -eq 12] || echo hi**
e. **[!bat = cat] && echo hi**

90. What is the output on your screen if a user signals an end-of-file from the keyboard during this command sequence? **read input && echo $?**
a. an error message
b. no output on screen
c. **1**
d. **$?**
e. **0**

91. If **bar** is a script containing the line **TERM=vt100 ; export TERM**, what is the output on your screen of the following command sequence:
```
TERM=linux ; ./bar ; echo $TERM
```
a. **bar**
b. **$TERM**
c. **linux**
d. **TERM**
e. **vt100**

92. Which line below is most likely to be the beginning of an error message?
a. **echo 1>&2 "... "**
b. **echo 1<&2 "... "**
c. **echo 2>$1 "... "**
d. **echo 2>&1 "... "**
e. **echo 2<$1 "... "**

93. If **bar** is an executable script containing the line **dog=bat** then what is the output of this sequence of three commands:
```
dog=cat ; ./bar ; echo "the '$dog' ate"
```
a. **the $dog ate**
b. **the 'bat' ate**
c. **the 'dog' ate**
d. **the '$dog' ate**
e. **the 'cat' ate**

94. Which correct command sequence below always outputs just the date only if the first argument is **both** not empty **and** a directory?
    a. `if [ "-s $1" && "-d $1" ]; then date ; fi`
    b. `if [ "$1" -eq -f -a "$1" -eq -d ]; then date ; fi`
    c. `if [ -s -a -d "$1" ]; then date ; fi`
    d. `if [ -d "$1" -a -s "$1" ]; then date ; fi`
    e. `if [ -s && -d "$1" ]; then date ; fi`

95. 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. `bar`
    b. `hi`
    c. an error message and then the contents of the password file
    d. the conents of the password file followed by `hi`
    e. an error message and then `hi`

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

97. What is the output on your screen of the following command sequence:
    `echo wc >wc ; wc wc >wc ; head wc`
    a. `wc`
    b. `1 1 2 wc`
    c. no output
    d. `1 1 3 wc`
    e. `0 0 0 wc`

98. If `/bin/bat` is a program that outputs `hi` and `/usr/bin/bat` is a program that outputs `foo` what is the output of this shell command sequence:
    `PATH=/etc:/usr/bin:/bin ; bat`
    a. `foo` followed by `hi`
    b. `bash: bat: command not found`
    c. `foo`
    d. `hi` followed by `mom`
    e. `hi`

99. If `a=ant` and `b=bat` then what is the output on your screen of the following command sequence: `[ $a = bat -o $b = bat ] ; echo $?`
    a. no output
    b. the number 1 or 0 followed by another 1 or 0 on a new line
    c. `0`
    d. `test: $a: integer expression expected`
    e. `1`

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

Answer Key - DAT 2330 – Ian Allen – Fall 2004 - DAT 2330 Practice Test - 0%

Office use only: 91 2 99 44 49 92 9 56 25 45 22 8 79 70 75 85 13 51 50 89 14 46 96 36 88 87 65 74 94 53 1 48 37 3 97 20 16 15 59 17 47 43 58 71 42 18 100 93 83 95 62 63 23 5 69 77 31 27 29 90 86 82 39 60 64 40 81 66 35 30 80 11 19 68 73 34 38 55 10 84 76 32 41 54 33 12 21 67 26 98 24 57 61 28 78 7 6 52 4 72

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

89. b
90. b
91. c
92. a
93. e
94. d
95. c
96. a
97. e
98. c
99. c
100. e

Count of a: 21 21%
Count of b: 25 25%
Count of c: 18 18%
Count of d: 18 18%
Count of e: 18 18%

With 5 choices: 100
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

Macro .cmd splits: 48
Macro .ans splits: 0