Evaluation: Part I - 58 M/C Questions **Name:** ________________________

Important Instructions

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

Multiple Choice - 58 Questions - 10 of 15%

(Office use only: 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)

1. If **/home/idallen** is a directory name, which of the following pathnames always leads to the same directory?
   † **a. /home/./../home/idallen**
   b. **/home/../home/../idallen**
   c. **./home/idallen**
   d. **../home/idallen**
   e. **/home/./home/../idallen**

2. If my current working directory is **/usr**, 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 ../home/me/foo**
   b. **cp ../usr/../etc/passwd ./home/me/foo**
   c. **cp ../usr/./etc/passwd ./home/me/foo**
   d. **cp ../usr/passwd ../home/foo**
   e. **cp ../usr/passwd ./me/foo**

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

4. 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 -r nine nine | tail -5 | head -1
   † **a. 3**
   b. **7**
   c. **5 5**
   d. **7 7**
   e. **1 1**

5. 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 foo | sort -r | head -4 | tail -1
   † **a. 8**
   b. **7**
   c. **6**
   d. **5**
   e. **9**

6. Which Unix command sequence deletes a directory and everything inside it?
   † **a. rm -r dir**
   b. **mv -r dir**
   c. **erase -r dir**
   d. **rmdir -r dir**
   e. **delete -r dir**

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

8. If you type the command: **wc**
   which of the following key sequences will send an EOF, generate output, then take you back to the command prompt?
   † **a. [CTRL-D]**
   b. **[CTRL-C]**
   c. **[CTRL-L]**
   d. **[CTRL-U]**
   e. **[CTRL-R]**

9. If you type the command: **sort**
   which of the following key sequences will interrupt it (no output) and take you immediately back to the command prompt?
   † **a. [CTRL-C]**
   b. **[CTRL-D]**
   c. **[CTRL-L]**
   d. **[CTRL-U]**
   e. **[CTRL-R]**

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

11. Which command line below does not show any lines from inside the file **bat**?
   † **a.** **ls bat**
   b. **head bat**
   c. **tail bat**
   d. **cat bat**
   e. **sort bat**

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

13. How many command arguments does the shell pass to this **echo** command:
   echo 'It's "lots" isn't it? I won't be guessing.
   † **a.** Five arguments.
   b. Four arguments.
   c. Three arguments.
   d. Two arguments.
   e. Six arguments.

14. How many command arguments does the shell pass to this **echo** command:
   echo <one two three >four five
   † **a.** Three arguments.
   b. Four arguments.
   c. Five arguments.
   d. Six arguments.
   e. Two arguments.

15. Which of the following is true, given this long directory listing from **ls**:
   drwxr-x--x 512 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 512 is the inode number of this directory.
   d. The number 512 is the octal permissions of this directory.
   e. The number 512 is the size of this directory.

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

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

18. What appears on your screen after this bash shell command line?
   echo 123 | wc -c
   † **a.** **4**
   b. **3**
   c. **2**
   d. **1**
   e. no output on screen

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

20. What appears on your screen after this bash shell command line?
   echo hi >out | sort -r
   † **a.** no output on screen
   b. **hi**
   c. **out**
   d. **ih**
   e. **tou**

21. What appears on your screen after this bash shell command line?
   echo date >ls ; cat ls > wc
   † **a.** no output on screen
   b. **1   1   4**
   c. **1   1   5**
   d. **ls**
   e. **date**

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

23. Which command below removes *only* this four-character file name containing a special character (and no others): **123***
   † **a.** **rm 123***
   b. **rm 123/***
   c. **rm 123***
   d. **rm 123//***
   e. **rm 123***

24. What appears on your screen after this sequence of commands:
   echo aaa >a ; cp a b ; echo bbb >>b ; cat a >b ; cat b
   † **a.** **aaa**
   b. **aaa** followed by **bbb**
   c. **bbb**
   d. **bbb** followed by **aaa**
   e. no output on screen

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

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

27. In an empty directory, what is the length of the longest file name created by the following shell two-command sequence:
   x='a ab abc abcd' ; touch "$x"
   † **a.** 13 characters
   b. 10 characters
   c. 4 characters
   d. 3 characters
   e. 2 characters

28. In an empty directory, what is the length of the longest file name created by the following two-command sequence: **x='a ab abc abcd' ; touch $x**
   † **a.** 4 characters
   b. 3 characters
   c. 2 characters
   d. 13 characters
   e. 10 characters

29. In an empty directory, what is the length of the longest file name created by the following sequence: **x='a ab abc abcd' ; touch '$x'**
   † **a.** 2 characters
   b. 3 characters
   c. 4 characters
   d. 13 characters
   e. 10 characters

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

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

32. 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. Two arguments, one of which is a single option and the other is a pathname.
   c. A three-letter file name and a **/sort** switch option argument.
   d. Two arguments, no options.
   e. Two options, no arguments.

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

34. Which command sequence below outputs only lines 11-15 of the 16-line file named **foo**?
   † **a.** **head -15 foo | tail -5**
   b. **tail -15 foo | head -11**
   c. **head -16 foo | tail -5 foo**
   d. **head -10 foo | tail -15 foo**
   e. **tail -10 foo | head -16 foo**

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

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

37. If file **twenty** contains twenty lines, and file **thirty** contains thirty lines, then how many lines are output by this command: **head twenty | sort thirty**
 † **a.** **30**
 b. **10**
 c. **20**
 d. **40**
 e. **50**

38. If file **x** contains ten lines, and file **y** contains twenty lines, then how many lines are in file **z** after this sequence of **bash** shell commands:
    sort x y >z ; head -5 y >y ; sort x y z >z
 † **a.** **10**
 b. **60**
 c. **50**
 d. **45**
 e. **15**

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

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

41. Which of the following shell command lines displays only the names in the current directory that are exactly three lower-case letters long?
 † **a.** **echo [a-z][a-z][a-z]**
 b. **echo [a,z][a,z][a,z]**
 c. **echo [az][az][az]**
 d. **echo *a-z*a-z*a-z***
 e. **echo ???**

42. Which of the following shell command lines displays only the names in the current directory that are exactly three digits long?
 † **a.** **echo [0-9][0-9][0-9]**
 b. **echo [1-3][1-3][1-3]**
 c. **echo [3][3][3]**
 d. **echo [?][?][?]**
 e. **echo ???**

43. Which of the following statements is true about this shell command line:
    >four one echo three
 † **a.** The command **one** gets exactly two arguments.
 b. The command **one** gets exactly three arguments.
 c. The command **echo** gets exactly one argument
 d. The command **echo** gets exactly two arguments
 e. The command **>four** gets exactly three arguments.

44. What is in file **out** after running this **bash** shell command line?
    echo 8 1 >out 2 9
 † **a.** **8 1 2 9**
 b. **8 1**
 c. **8 1 0**
 d. **8 1 >out 2 9**
 e. no output (empty file)

45. What is the output on your screen of this bash shell command line in an empty directory? **touch foo ; echo bar | ls**
 † **a.** **foo**
 b. **bar**
 c. **foo** followed by **bar**
 d. **bar** followed by **foo**
 e. no output on screen

46. What is the output on your screen of this bash shell command line in an empty directory? **touch .bar ; echo foo | ls**
 † **a.** no output on screen
 b. **foo**
 c. **.bar**
 d. **foo** followed by **.bar**
 e. **.bar** followed by **foo**

47. In an empty directory, what is the output on your screen 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**

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

49. In an empty directory, what is the output on your screen of these three commands:
    touch .a .b aa bb zz ; z='*' ; echo $z
    † **a.** **aa bb zz**
    b. **$z**
    c. **zz**
    d. *****
    e. no output on screen

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

51. 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 cat foo bar**
    e. **grep bar >foo**

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

53. In the output of command **ls -a**, the output pathname that is a double dot (**..**) signifies what?
    † **a.** The parent directory.
    b. A file or directory with double links.
    c. A hidden file.
    d. The current directory.
    e. The root directory.

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

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

56. What is true after this bash shell command line?
    who >cat ; ls -ls cat >head
    † **a.** The file **head** contains one line.
    b. The **head** command reads the output of the **ls** command.
    c. The **ls** command reads the output of the **cat** command on standard input.
    d. The **cat** command receives the output of **who** on standard input.
    e. The shell finds and executes more than two commands.

57. 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 [ALT]-[F2]
    d. Type [CONTROL]-[ALT]-[UP]
    e. Type [CONTROL]-[BACKSPACE]

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

Answer Key - CST 8129 – Ian Allen – Fall 2005 - CST 8129 Unix Test #1 - 15%

Office use only: 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

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Count of a: 58 100%

With 5 choices: 58

Macro .cmd split no indent: 1
Macro .cmd split with indent: 22