Evaluation: 42 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 - 42 Questions - 6 of 10%

(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)

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

2. How can you ask the **`bash`** (Linux) shell to complete commands or file names for you?
   † **a**. Type the first part of the command or file name and press the **`[TAB]`** key.
   b. Type the first part of the command or file name and press the **`[ALT]`** key.
   c. Type the first part of the command or file name and press the **`[ALT]-[F1]`** key.
   d. Type the first part of the command or file name and press the **`[CTRL]-[D]`** key.
   e. Type the first part of the command or file name and press the **`[CTRL]-[C]`** key.

3. 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`**

4. If you type the command **`grep pattern`**
   which key sequence will send an EOF and take you immediately back to the command prompt?
   † **a**. **`[CTRL-D]`**
   b. **`[CTRL-C]`**
   c. **`[CTRL-L]`**
   d. **`[CTRL-U]`**
   e. **`[CTRL-R]`**

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

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

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

8. How many command arguments does the shell pass to this **`echo`** command:
   `echo 'It's "1 2" isn't it? I can't decide.`
   † **a**. Four arguments.
   b. Five arguments.
   c. Six arguments.
   d. Two arguments.
   e. Three arguments.

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

10. Which statement is true, given this long directory listing from **`ls`**:
    `drwxr-x--x 256 ian user 512 May 30 12:35 dir`
    † **a**. The number 512 is the size of this directory.
    b. The number 512 is the count of links (names) this directory has.
    c. The number 256 is the inode number of this directory.
    d. The number 256 is the octal permissions of this directory.
    e. The number 256 is the size of this directory.

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

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

13. 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 of this command:
```
sort nine nine | tail -5 | head -1
```
† **a**. **7**
b. **1**
c. **9**
d. **5 5**
e. **1 1**

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

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

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

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

18. 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.

19. 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**. **2**
b. **3**
c. **4**
d. **5**
e. **1**

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

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

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

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

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

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

26. What is the possible output on your screen of this command line:
echo wc >date ; sort date >date ; cat date
† **a**. no output
b. **wc**
c. **1 6 28 date**
d. **1 6 29 date**
e. **Mon Sep 27 15:58:34 EDT 2004**

27. 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**. the parent directory of **dir** now has a file named **old** in it
b. the directory **dir** now contains only a file named **old**
c. there is a second copy of the file **new** in the file named **old**
d. the command fails because the path **./dir/../new** does not exist
e. the command fails because the path **../myhome/old** does not exist

28. If file **x** contains ten lines, and file **y** contains twenty 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**. **50**
b. **55**
c. **60**
d. **40**
e. no lines (empty file)

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

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

31. Which command line 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 [1-3][1-3][1-3]`
c. `echo [3][3][3]`
d. `echo [?][?][?]`
e. `echo ???`

32. If file **twenty** contains twenty lines, and file **thirty** contains thirty lines, then how many lines are output by this command:
```
tail twenty | cat thirty
```
† **a**. **30**
b. **50**
c. **20**
d. **40**
e. no lines (no output)

33. What is in file **two** after running this command line?
```
echo one >two three four
```
† **a**. **one three four**
b. **one**
c. **echo one**
d. **three four**
e. no output

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

35. In the output of the command **ls -i -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 name with an unprintable character.
e. An inode (index) numbered file.

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

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

38. What appears on your screen after this command line?
```
mkdir xx ; rmdir xx | wc -c
```
† **a**. **0**
b. **1**
c. **2**
d. **3**
e. no output

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

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

41. In an empty directory, how many files are created by this command:
```
touch a  "b c"  ' '  d  e
```
† **a**. **5**
b. **6**
c. **7**
d. **3**
e. **4**

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

Answer Key - DAT 2330 – Ian Allen – Fall 2004 - DAT 2330 Unix Test #1 - 10%

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

```
 1. a                          41. a
 2. a                          42. a
 3. a
 4. a                        Count of a:  42  100%
   5. a
   6. a                      With 5 choices: 42
   7. a                        1 2 3 4 5 6 7 8 9 10 11
   8. a                        12 13 14 15 16 17 18 19
 9. a                          20 21 22 23 24 25 26 27
10. a                          28 29 30 31 32 33 34 35
11. a                          36 37 38 39 40 41 42
12. a
  13. a                     Macro .cmd splits: 21
  14. a                     Macro .ans splits: 0
  15. a
  16. a
17. a
18. a
19. a
20. a
  21. a
  22. a
  23. a
  24. a
25. a
26. a
27. a
28. a
  29. a
  30. a
  31. a
  32. a
33. a
34. a
35. a
36. a
  37. a
  38. a
  39. a
  40. a
```