PRINT Name: _____   **LAB Section:** [ ][ ][ ]

One-Answer Multiple Choice   **45 Questions**   **Weight 10%**

☞ Read **all** the words of these instructions and **both** sides (back and front) of all pages.
☞ Manage your time. Answer questions you know, first. One Answer per question.
☞ **PRINT** your Name and Lab on this Question Sheet. You may write or draw on this sheet.
☞ Use your full, unabbreviated name on the mark-sense form. Do not abbreviate your name.
☞ Enter your NAME, Student Number, and Answers. Fill in the bubbles with pencil, no pen.
☞ The answer to the last question about reading/doing all these test instructions is: **Tak**

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1. *[50/201]* What command shows all the lines in file **file** that contain the text **text**?

    a. **fgrep text file**   *b.* **cat file | find text**
    c. **cat file > fgrep text**   *d.* **fgrep file 'text'**
    e. **fgrep text >file**

2. *[55/202]* If file **a** contains 2 lines, and file **b** contains 3 lines, then how many lines are output on your screen by this: **cat b | echo a**

    a. **2**   *b.* **3**   *c.* **3** followed by **1**
    d. **1**   *e.* **3** followed by **2**

3. *[87/200]* If my current directory is **/home**, which command copies the password file into existing directory **/home/user** under the name **foo**?

    a. **cp user/../../etc/passwd ./user/foo**
    b. **cp ./../etc/passwd ../user/foo**
    c. **cp ../home/./user/../etc/passwd ./user/./foo**
    d. **cp ../../etc/./passwd /user/foo**
    e. **cp ./user/../etc/passwd ../home/user/foo**

4. *[88/202]* In an empty directory, how many words are in file **c** after this:
    touch a ; mv b a >b ; ls >c

    a. **3**   *b.* **4**   *c.* **0**   *d.* **2**   *e.* **1**

5. *[89/201]* In an empty directory, what is in file **bar** after this:
    echo hi >bar ; ls nosuchfile | cat >bar

    a. **hi**
    b. **bar**
    c. **nosuchfile**
    d. an error message from **ls** saying **nosuchfile** does not exist
    e. nothing (empty file)

6. *[95/201]* If **mt** is an empty sub-directory, what is true after this:
    touch foo ; mkdir bar ; mv foo bar/mt

    a. the directory **bar** now contains a file named **foo**
    b. the directory **mt** now contains a directory named **bar**
    c. the directory **mt** now contains a file named **foo**
    d. the directory **mt** is still empty
    e. the command fails because **bar/mt** is not a directory

7. *[95/198]* What is the output on your screen after these two command lines:
    echo foo >x ; cp x y ; echo bar >>y
    head x >y ; head x >x ; cat x y

    a. **foo** followed by **bar**   *b.* **foo**
    c. no output   *d.* **foo** followed by **foo**
    e. **bar** followed by **foo**

8. *[96/201]* In an empty directory, what is the output on your screen after this:
    date >.a ; users >.b ; ls *

    a. no output
    b. an error message from **ls** saying ***** does not exist
    c. **.a   .b**
    d. *****
    e. **.   ..   .a   .b**

9. *[99/200]* If file **nine** contains 9 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: **cat nine nine | head −n 10 | tail −n 1**

    a. **1 1**   *b.* **9**   *c.* **9 9**   *d.* **1**   *e.* **10**

10. *[101/201]* If **mt** is an empty sub-directory, what is true after this:
      touch bar ; mkdir foo ; mv bar mt/foo

    a. the directory **foo** now contains a file named **bar**
    b. the command fails because **mt/foo** is not a directory
    c. the directory **mt** now contains a file named **bar**
    d. the directory **mt** is still empty
    e. the directory **mt** now contains a file named **foo**

11. *[101/201]* If my current directory is **/usr**, which of these pathnames is equivalent to the file name **/bin/bash**?

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

12. *[102/201]* What is the output of this in an empty directory:
      date >.bar ; touch .foo ; echo .?*

    a. **.?***
    b. **..   .bar   .foo**
    c. an error message from **echo** saying **.?*** does not exist
    d. **.bar**
    e. **.bar   .foo**

13. *[106/203]* In an empty directory, how many words are in file **c** after this:
      touch a b ; rm b ; ls >c

    a. **0**   *b.* **3**   *c.* **1**   *d.* **4**   *e.* **2**

14. *[110/203]* How do I search for the string **text** in the paginated output from the **man** command on my screen?

    a. **help text**   *b.* **grep text**   *c.* **find text**
    d. **@text**   *e.* **/text**

15. *[111/201]* Which *CTRL* key will send an **EOF** to a command reading your keyboard, and take you back to the command prompt?

    a. **^C**   *b.* **^U**   *c.* **^D**   *d.* **^E**   *e.* **^R**

16. *[112/201]* What is the correct syntax to redirect both standard output and standard error into the same output file?

    a. **cmd 2>&1 >out**   *b.* **cmd 2>1 >out**
    c. **cmd 1>out 2>out**   *d.* **cmd >out 2>&1**
    e. **cmd 1>out 2>1**

17. *[113/201]* What is the output of this in an empty directory:
      touch 1 13 .13 2 213 3 30 31 .31 ; echo [13]*

    a. an error message from **echo** saying **[13]*** does not exist
    b. **13**
    c. **13 .13 213**
    d. **[13]***
    e. **1 13 3 30 31**

18. *[114/202]* Which pathname almost always leads to the same file named: **/bin/ls**

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

19. *[116/199]* If file **a** contains 2 lines, and file **b** contains 3 lines, then how many lines are in file **c** after this:
      cat a b >c ; cat b >>a ; cat c a >c b

    a. **10**   *b.* **13**   *c.* **8**   *d.* **0**   *e.* **7**

20. *[117/202]* If **mt** is an empty sub-directory, what is true after this:
      touch mt/bar ; mkdir bar ; mv mt/bar bar/me

    a. the **mkdir** fails because **bar** already exists
    b. there is a second copy of the file **bar** in the file named **me**
    c. the command fails because the name **bar/me** does not exist
    d. the directory **mt** is now empty
    e. the directory **mt** now contains only a file named **me**

21. *[117/203]* What command will recursively find all pathnames named **foo** in directory **/etc**?

    a. **ls −R 'foo' /etc**
    b. **grep /etc −basename 'foo'**
    c. **grep 'foo' /etc**
    d. **find /etc 'foo'**
    e. **find /etc −name 'foo'**

22. *[120/202]* In an empty directory, what is the output on your screen of this:
    echo foo >a >b ; head a

    a. **head: a: No such file or directory**
    b. **foo >a >b**
    c. no output
    d. **foo foo**
    e. **foo**

23. *[123/202]* If file **a** contains 2 lines, and file **b** contains 3 lines, then how many lines are output on your screen by this: **mv a b | head**

    a. **2** followed by **3**   b. **2**
    c. **3** followed by **2**   d. no output on screen
    e. **3**

24. *[124/202]* Which displays all the non-hidden names in the current directory that contain the letter **z** (and no other names)?

    a. **echo [z]**   b. **echo ?z?**   c. **echo *z***
    d. **echo z***   e. **echo *z**

25. *[130/201]* What is in file **a** after this: **echo 1 2 >a 3 4**

    a. **1 2**   b. **1 2 3 4**
    c. nothing (empty file)   d. **3 4**
    e. **12**

26. *[133/202]* If I am in directory **/tmp** and **mt** is an empty sub-directory, what is true after this:
    touch mt/bar ; mkdir mt/me ; cp mt/bar ./mt/../me

    a. there is a second copy of the file **bar** in file **/tmp/me**
    b. the command fails because the name **mt/bar** does not exist
    c. the directory **mt** now contains only a file named **me**
    d. the directory **mt** is now empty
    e. there is a second copy of the file **bar** in directory **mt**

27. *[133/202]* What is the output on your screen after this:
    mkdir dir ; touch a b dir/.a dir/.b ; echo dir/*

    a. **dir/.a dir/.b**
    b. **dir/***
    c. no output
    d. **dir/. dir/.. dir/.a dir/.b**
    e. **dir/a dir/b**

28. *[134/202]* Given the pathname **/a/b/c**, the *basename* of this pathname is:

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

29. *[135/202]* How many arguments and options are there to the command:
    ls −la ls wc cd

    a. Four pathname arguments and no options.
    b. One option and four command names.
    c. Three command line arguments and one option.
    d. Four command line arguments, one of which contains two options.
    e. Four command line arguments with no options.

30. *[135/202]* How many lines are in file **a** after this:
    date >a ; date >a ; date >>a ; date >>a

    a. **3**   b. **2**   c. **0**   d. **1**   e. **4**

31. *[135/203]* Which displays all the non-hidden names in the current directory that contain the case-insensitive word **ian** (and no other names)?

    a. **echo *[ianIANIaniAniaNIAnIaNiAN]***
    b. **echo *(I,i,A,a,N,n)***
    c. **echo *[Ii][Aa][Nn]***
    d. **echo *[IiAaNn]***
    e. **echo *[ian,IAN,Ian,iAn,iaN,IAn,IaN,iAN]***

32. *[136/202]* Which of these will make file **foo** contain all of the content of file **a** followed by all of the content of file **b**?

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

33. *[137/202]* Which deletes a directory and everything inside it?

    a. **rmdir −r dir**   *b.* **rmdir −all dir**
    c. **rm −r dir**   *d.* **rm −all dir**
    e. **deltree −all dir**

34. *[141/202]* If file **a** contains 2 lines, and file **b** contains 3 lines, then how many lines are output on your screen by this: **cat b | head a**

    a. **3** followed by **2**   *b.* **2**   *c.* **3**
    d. **2** followed by **3**   *e.* **5**

35. *[143/202]* Give the minimum number of directories in this valid pathname:
    /a/b/c/d

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

36. *[143/201]* If file **nine** contains 9 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: **sort nine nine | tail −n 3 | head −n 1**

    a. **1**   *b.* **6 6**   *c.* **6**   *d.* **1 1**   *e.* **8**

37. *[146/202]* In a directory that contains only the file **a**, what happens after this:
    cp a b

    a. there is only the file named **b** in the directory now
    b. the command fails because the name **b** does not exist
    c. the command fails because **b** is not a directory
    d. there is a copy of the file named **a** in the file named **b**
    e. an empty file named **b** is created

38. *[153/201]* The shell expands a leading tilde (**~**) in a pathname (e.g. **~/foo**) to be:

    a. the parent directory   *b.* the ROOT directory
    c. the current directory   *d.* the directory **/root**
    e. your HOME directory

39. *[157/201]* What is the output of this successful command sequence?
    cd /tmp ; mkdir foo ; mkdir bar ; pwd

    a. **/tmp**   *b.* **/tmp/bar**
    c. **/bar**   *d.* **/tmp/foo/bar**
    e. **/tmp/foo**

40. *[158/201]* In a manual page **SYNOPSIS** section, ellipsis (three dots) (**...**) mean:

    a. something that is optional   *b.* a hidden directory
    c. no special meaning   *d.* something that is repeated
    e. the parent directory

41. *[159/201]* To "throw away" (hide) standard error output of a command, use:

    a. **cmd 1>/dev/sda1**   *b.* **cmd 2>/dev/null**
    c. **cmd 2>&1**   *d.* **cmd 2>/dev/sda1**
    e. **cmd 1>&2**

42. *[161/201]* The option to **ls** that shows hidden names is:

    a. **−a**   *b.* **−1**   *c.* **−l**   *d.* **−h**   *e.* **−i**

43. *[162/203]* Which *CTRL* key will send an **Interrupt** to make a command end and take you back to the command prompt?

    a. **^U**   *b.* **^D**   *c.* **^R**   *d.* **^E**   *e.* **^C**

44. *[168/201]* The command that creates a directory and all parent directories is:

    a. `touch -r a/b/c`   *b.* `mkdir -p a/b/c`
    c. `mkdir -r a/b/c`   *d.* `touch -rf a/b/c`
    e. `touch -p a/b/c`

45. *[172/200]* **Did you read all the words of the test instructions on page one?**

    a. `Jes` *(Yes - Esperanto)*   *b.* `Sim` *(Yes - Portuguese)*
    c. `Igen` *(Yes - Hungarian)*   *d.* `Tak` *(Yes - Polish)*
    e. `Taip` *(Yes - Lithuanian)*

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