

CIS 90 - Spring 2012 - PRACTICE TEST 2 - 30 points

Honor Code:

This is a practice test and you may work with others and use the forum. However on the real test you will not be able to work with or receive help from others.

Name: _____

Practice downloading and emailing the completed test to yourself as an attachment. On the real test you will email your filled-in test to the instructor. Make sure you can read the answers on the test after you have emailed it as an attachment.

Note to instructor:

Make some trouble on Sun
Hide some eggs

Part 1 - These questions come from the online Flashcards (1 point each)

[Q1] A directory contains three files: *stage1*, *stage2* and *grub.conf*. After doing a **rm stage**[12] command, in that directory, how many files are left?

[A1] _____

[Q2] What is the link count of a newly created directory?

[A2] _____

[Q3] What command and option is used to remove a directory containing files?

[A3] _____

[Q4] What command would change the group from cis90 to cis191 for the file *labxc03*?

[A4] _____

[Q5] What is the numeric permission equivalent of rwx r-x r--?

[A5] _____

[Q6] With a umask of 077 what permissions would a newly created directory have?

[A6] _____

[Q7] Without having x (execute) permission on a directory, is it possible to list the names of the files it contains?

[A7] _____

[Q8] What happens if you type this command?

> mythesis

[A8] _____

[Q9] What symbol is used to pipe the standard output (stdout) of one command to the standard input (stdin) of another?

[A9] _____

[Q10] What redirection symbol is used to redirect standard input (stdin)?

[A10] _____

Part 2 – Use Sun in VLab for the following questions (1 point each)

Login to Sun, using your own username and VLab password:

- Use Putty from any of the classroom or CIS Lab stations
- Or use the **ssh** command from any of the Kate, Not-Opus, or Mr-Eko VMs in VLab. If you use VLab, be sure to reserve the VM first on Fang.

[Q11] On Sun, What is the first line of the file named *dogtail* in your *Poems/Dickinson* directory?
(Note: you will need to do a little troubleshooting before you can answer this question)

[A11] _____

[Q12] On Sun, how many lines in all the files in */home/cis90/depot* (including the subdirectories) contain the word "Homer"?

[A12] _____

[Q13] On Sun, what is the absolute path of the file containing "Rin Tin Tin was here" in the */home/cis90/depot* directory (including its sub-directories)?

[A13] _____

[Q14] On Sun, of the three files Julius, Nero and Octavian in the */home/cis90/depot/empire/Tivoli* directory, which contains the most words?

[A14] _____

[Q15] On Sun, is the command **badcommand** on your path? If so, what is the inode number of the directory it is in?

[A15] _____

[Q16] On Sun, how many regular files are there in */lib* (including all sub-directories)?

[A16] _____

[Q17] On Sun, what is the absolute pathname for the */etc/passwd* file?

[A17] _____

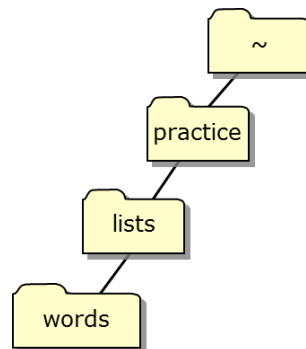
If you used VLab to get to Sun then be sure and shutdown your VM when finished and remove your reservation from Fang so it is available for the next student.

Part 3 – Use Opus to verify your answers to the following questions (1 point each)

[Q18] Do a dictionary sort of the words in */home/cis90/depot/randomwords* and email the last 10 of them to rsimms on Opus using the **mail** command and a subject of "Practice Q18". What single command line does all this (no ;'s)?

[A18] _____

[Q19] What single command (no ;'s) would create this directory structure in your home directory?



[A19] _____

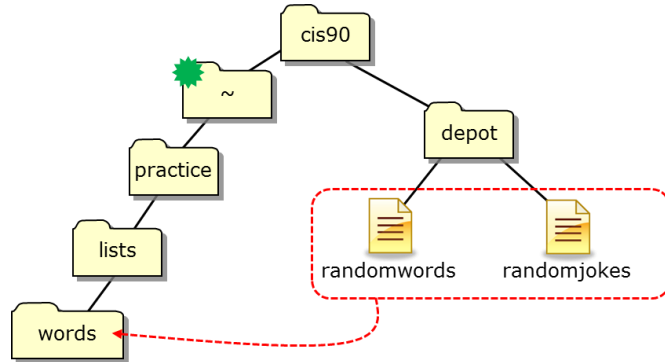
[Q20] What is the numeric form of the permissions on your terminal device?

[A20] _____

[Q21] What is the numeric form of the permissions on the file in */home/cis90/depot/filetypes* whose inode number is 131493?

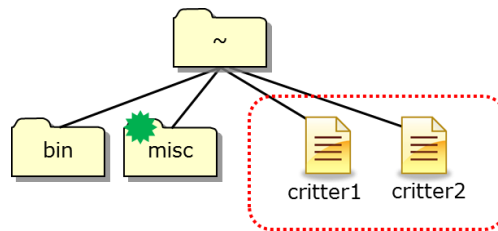
[A21] _____

[Q22] From the directory with the * what command using the three metacharacters [] * would copy only *randomwords* and *randomjokes* from the *depot* directory to the new *words* directory created by the previous test question?



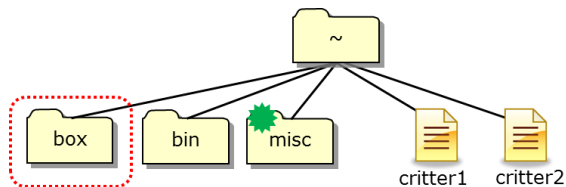
[A22] _____

[Q23] From the directory with the * what command would create the file *critter1* and *critter2* in your home directory?



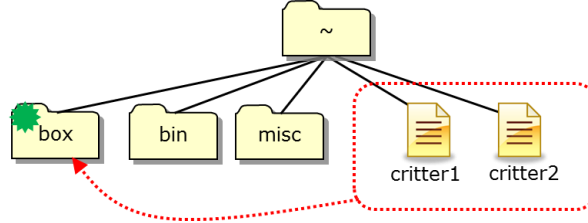
[A23] _____

[Q24] From the directory with the * what command would create a directory named *box* in your home directory?



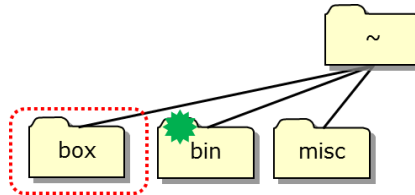
[A24] _____

[Q25] From the directory with the ✱ what command would move *critter1* and *critter2* to the new *box* directory in your home directory?



[A25] _____

[Q26] From the directory with the ✱ what single command (no ;'s) would interactively remove the *box* directory and each file in it?



[A26] _____

[Q27] Given the file *expressions* contains these two lines:

```
123+57-3
12/0
```

What complete command (no ;'s) using **bc** would input the math problems in *expressions*, **append** the calculated answers to the file *results* and write any errors to the file *errors*?

[A27] _____

[Q28] Benji has the following file in his home directory:

```
/home/cis90/simben $ ls -l torbellino
-rw-rw-r-- 1 simben90 cis90 0 Apr  3 10:05 torbellino
```

If the umask value was 333 and he copied the *torbellino* file to *torbellino.bak*, what would the permissions, in numerical form, be on *torbellino.bak*?

[A28] _____

[Q29] What command would cause all future directories to be created with all permissions for the owner, read and execute permissions only for the group, and no permissions whatsoever for others?

[A29] _____

[Q30] Parse the following command, what is the second argument passed to the **stat** command?

```
stat -Z /dev/[sh]da* > notarg1 2> notarg2
```

[A30] _____

Extra credit

[Q31] What is the numeric version of the permissions on the **uname** command?

[A31] _____

[Q32] From Benji's poems directory, what do the following two commands do?

```
cp -r Shakespeare/ sonnets/  
grep -l memory sonnets/* | xargs sed -i 's/memory/RAM/g'
```

[A32] _____

[Q33] cd into /home/cis90/simben, why does

```
find -name *egg  
only find one egg file, yet  
find -name '*egg'  
finds multiple egg files?
```

[A33] _____