

Course: CIS 68C1-01

Homework: #6

Due: Monday, December 10th, 6pm

Instructions

Your homework this week is to complete the problems below. These problems are the written part of the final exam from a previous session of this course. This should give you some additional insight into how your final exam will be structured, and what to expect. Complete the problems below and turn in your answers by start of class on the due time above. Please feel free to email your homework or bring it with you to class.

Multiple Choice

1. Your system has been broken into or hacked. Which of the following is the most likely suspect?
 - a. the CIA
 - b. your grandmother
 - c. an insider
 - d. Buddhist Monks

2. What file does the line below come from?

```
project:*:200:sam,jane
```

- a. /etc/passwd
 - b. /etc/shadow
 - c. /etc/rc.d/init.d
 - d. /etc/group
 - e. none of the above
3. The daemon that controls many internet daemons is:
 - a. initd
 - b. imapd
 - c. nfsd
 - d. portmap
 - e. inetd
 4. Which facility would you use to routinely and automatically remove large log files?
 - a. rm
 - b. find
 - c. cron
 - d. all of the above
 5. With **umask** set to *022*, what will the permissions be on newly created directories?
 - a. 666
 - b. 755
 - c. 664
 - d. 644
 6. Which of the following commands would check a new Linux file system?
 - a. `mkfs -t ext2 /mnt/hda0`
 - b. `fsck -t ext2 /mnt/hde2`
 - c. `mkfs -t ext2 /dev/hda3`
 - d. all of the above
 7. What is the octal value of the setuid bit?
 - a. 200
 - b. 2000
 - c. 400
 - d. 4000
 - e. none of the above

8. EGID is used to:
 - a. determine a user's access rights
 - b. set permissions on group files
 - c. determine a group's identity
 - d. none of the above
9. Which are the most effective way(s) to learn Unix Administration?
 - a. read man pages
 - b. practice
 - c. read your text book
 - d. both (a) and (b)
10. Which of the following is **not** true for a backup strategy:
 - a. it should not include files in /tmp
 - b. should be well planned and organized
 - c. should include discarding tapes periodically
 - d. should be performed during peak hours
11. Who is your favorite instructor of all time? Hint: there is one correct answer. ☺
 - a. Mike Cappella
 - b. all of the above

Short Answer

12. The book gives an example **umask** of *027*, which is not a typically used value for a umask. Why?
13. You set up a common, shared Unix account for all your friends. Is this a good or bad idea? Explain your answer:
14. Explain the command:


```
fsock -t dos /dev/fd0
```
15. What command would you use to create a new device entry in /dev?
16. What is the difference between runlevel 3 and runlevel 5 in RedHat Linux?
17. What capability do the following daemons provide: mountd, lockd, and biod?
18. The shutdown scripts in /etc/rc.d first send a TERM signal to all processes. Then the shutdown scripts immediately send a KILL signal to all processes. Why is this done?
19. The first entry in RedHat's /etc/passwd file is the root account. What is the second entry, and what is it used for?
20. What are the most common **umask** values?
21. You attempt to give setuid permission to some program. The permissions you set are shown below. Why are these permissions completely meaningless?

```
-r-s----- 1 root root
```

22. What is the file **modules.conf**?
23. What is wrong with the following PATH for the *root* user?


```
./usr/sbin:/sbin:/bin:/root/bin
```
24. Be as precise as possible; explain what the following command does:

```
kill -9 -1
```