CIS 90 - Test 3 – Fall 2010

30 points + 10 points extra credit (each question worth 2 points)

1) What complete command was used to produce this output?

```
rochajua simmsben jimg rsimms root root
# users=6
/home/cis90/simmsben $
```

(q1)_____

2) What command was used to produce this output?

```
-bash: iptables: command not found
/home/cis90/simmsben $
```

(q2)_____

3) You have received an email from Rich on Opus. What is Benji's favorite food?

(q3)_____

4) What is the absolute pathname for the */etc/passwd* file?

(q4)_____

5) A UNIX file has three elements. Two of the elements are the name and the data. What is the third element?

(q5)_____

6) There is a *dogs* directory in the */home/rsimms* directory on Opus. Inside that directory are more directories and files. You may wish to explore that directory with the **tree** and/or **ls** commands.

From your home directory, what complete command, using the three meta-characters [,], and *, would copy just the Hamlet and Romeo files to your home directory?

(q6)_____

7) Create a file in your home directory named *lassie*.

What complete command would set the permissions on *lassie* so that:
- you have only read & write permissions,
- group users have only read permission,
- and everyone else have no permissions whatsoever?

(q7)_____

8) There is a *dogs* directory in the */home/rsimms* directory on Opus. Inside that directory are more directories and files. You may wish to explore that directory with the **tree** and/or **ls** commands.

Go through all the files in the *dogs* directory (and its sub-directories) and count the number of lines containing the word cat. How many lines contain the word cat?

(q8)_____

9) Using all of the following:
- a) The **echo** command using only arithmetic expressions as argument(s)
- b) The **bc** command
- c) A | (pipe)
- d) Some type of redirection

What command, using all the elements above, would output "Runtime error (func=(main), adr=5): Divide by zero" to a file named *errors*?

(q9)_____

10) Benji has a small problem. He has run the **app** program in one terminal and it's no longer responding. He wants to kill it but can't remember how. In his second terminal he displays his current processes:

```
/home/cis90/simmsben $ ps -u simmsben
  PID TTY          TIME CMD
24093 ?        00:00:00 sshd
24094 pts/7    00:00:00 bash
25463 pts/7    00:00:00 app
25764 ?        00:00:00 sshd
25765 pts/1    00:00:00 bash
25810 pts/7    00:00:00 sleep
25811 pts/1    00:00:00 ps
/home/cis90/simmsben $
```

What command should Benji use to send a SIGKILL signal to his **app** process?

(q10)_____

11) Copy the file */etc/samba/smb.conf* to your home directory. This is the Samba service configuration file. We are going to practice modifying this file to allow Opus users to share files on the network with Windows computers. Edit your copy of the *smb.conf* file with **vi** and make the following changes:

- Find the line containing: **workgroup = MYGROUP**
  and change **MYGROUP** to **WORKGROUP**
- Find the line containing: **server string = Samba Server Version %v**
  and change **Samba Server Version %v** to **OPUS File Server %v**
- Add the following lines to the end of your smb.conf file:
      [depot]
      comment = Public files on Opus
      path = /var/shares/depot
      read only = yes
      guest ok = yes

Save your changes and copy your modified *smb.conf* file to the *turnin* directory using:

   cp smb.conf /home/rsimms/turnin/smb.conf.$LOGNAME

What **ls** command could you use to verify your *smb.conf* file was submitted correctly?

(q11)_____

Note: If we had modified the actual smb.conf file in /etc/samba/, opened ports 137-139, 445 in the firewall and restarted the smb service, then Windows users would be able to access files in a share named depot on Opus.

12) Without making any changes to your shell environment on Opus, has your UID variable been exported?

(q12)_____

13) Given the following command and output:

```
/home/cis90/simmsben $ lpstat
hplaser-577              simmsben        10240   Sat 04 Dec 2010 02:09:45 PM PST
hplaser-578              simmsben        33792   Sat 04 Dec 2010 02:09:52 PM PST
/home/cis90/simmsben $
```

What complete **lprm** command would Benji use to stop the printing of the larger file (the one queued at 02:09:52 PM PST)?

(q13)_____

14) What **scp** command (for Linux or Mac) or **pscp** command (for Windows) could you use to recursively download all the files in your home directory on Opus to your computer at home?

(q14)_____

15) From the */home/cis90* directory, what **tar** command would you use to archive:

- all the files in your home directory,
- all the files in the */home/cis90/bin* directory,
- and all the files in the */home/cis90/answers* directory

into a single tarball file in your home directory? This tarball should be named using your username with a .tar suffix.

(q15)_____

16) [Extra credit] From the Flashcards:

What command shows the name of the computer you are using??

(q16)_____

17) [Extra credit] From the Flashcards:

What command would show the online manual page for the ls command?

(q17)_____

18) [Extra credit] From the Flashcards:

What is an example command to read mail messages saved in the local mbox file?

(q18)_____

19) [Extra credit] From the Flashcards:

What UNIX command prints your current working directory?

(q19)_____

20) [Extra credit] From the Flashcards:

What echo command would show all filenames in the parent directory starting with a p?

(q20)_____