CIS 90 - Test 3 (Practice) — Fall 2010

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

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

```
NAME      LINE         TIME               IDLE        PID COMMENT
rochajua pts/1        2010-12-03 15:24 00:12        26426 (100-38-189-79.rastis.net)
simmsben pts/2        2010-12-03 15:38   .          26616 (dsl-63-249-103-107.dogs.com)
jimg     pts/3        2010-12-03 11:02 03:57        22772 (55-100-189-201.rastis.net)
rsimms   pts/4        2010-12-03 13:21   .          24150 (dsl-64-104-79-201.dogs.com)
root     :0           2010-11-02 16:18   ?          31706
root     pts/5        2010-11-02 16:18  old         31898 (:0.0)
/home/cis90/simmsben $
```

(q1)_____

2) What command was used to produce this output?

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

(q2)_____

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

(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 inode 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 Mars and Tarzan 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 full permissions,
- group users have read and write permission,
- and everyone else has only read permission?

(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 dog. How many lines contain the word dog?

(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, without any semi-colons (;'s), would output a 4 to a file named answers?

(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 SIGTERM signal to his app process?

(q10)_____

11) Copy the file /etc/httpd/conf/httpd.conf to your home directory. This is the Apache web service configuration file. We are going to practice modifying this file to enable all Opus user accounts to publish their own web sites. Edit your copy of the httpd.conf file with **vi** and make the following changes:

- Find the line containing: **UserDir disable**
  and comment it out by placing a # in front of it.
- Find the line containing: **# UserDir public_html**
  and enable it by removing the # in front of it.

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

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

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

(q11)_____

Note: If we had modified the actual httpd.conf file in /etc/httpd/conf/, opened port 80 in the firewall and restarted the Apache service, then all Opus users would really be enabled to publish web sites.

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

(q12)_____

13) Given the following command and output:

```
/home/cis90/simmsben $ lpq
hplaser is not ready
Rank    Owner   Job    File(s)                         Total Size
1st     watsoha 524    letter                          2048 bytes
2nd     maganfr 553    (stdin)                         1024 bytes
3rd     derysni 554    (stdin)                         1024 bytes
4th     maganfr 555    (stdin)                         1024 bytes
5th     gribsja 556    mymail                          4096 bytes
6th     maganfr 557    words                           1024 bytes
7th     maganfr 558    words                           1024 bytes
8th     antiden 561    treat1                          2048 bytes
9th     antiden 562    treat1                          2048 bytes
10th    antiden 563    treat1                          2048 bytes
11th    antiden 564    treat1                          2048 bytes
12th    salinja 570    vocab                           2048 bytes
13th    brownli 571    myreport                        1024 bytes
14th    sreckla 573    letter                          2048 bytes
15th    delfimi 574    calc                            4096 bytes
16th    komicse 576    (stdin)                         1024 bytes
17th    simmsbe 577    smb.conf                        10240 bytes
18th    simmsbe 578    httpd.conf                      33792 bytes
/home/cis90/simmsben $
```

What complete **cancel** command would Benji use to stop the printing of his smb.conf file?

(q13)_____

14) What **scp** command (for Linux or Mac) or **pscp** command (for Windows) could you use to download the myscript file in your bin 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 is the lowest level, inner-most component of a UNIX Operating System called?

(q16)_____

17) [Extra credit] From the Flashcards:

How do you change your terminal type to vt100?

(q17)_____

18) [Extra credit] From the Flashcards:

What command can you use to "chat" with another user?

(q18)_____

19) [Extra credit] From the Flashcards:

UNIX directories are like phone books. Instead of names and phone numbers they contain?

(q19)_____

20) [Extra credit] From the Flashcards:

What echo command would show in the working directory any 5 letter filenames starting with a B and ending with e?

(q20)_____