

**CIS 90 - Fall 2012 - TEST 1 - 30 points**

**Honor Code:**

This test is open book, open notes, and open computer. **HOWEVER, you must work alone. You may not share answers. You may not receive or give assistance to others.**

**Name:** \_\_\_\_\_  
(type your name to indicate your agreement to abide by the honor code above)

**Instructions:**

Download and save this test to your computer. Fill out the form, **save it** and email it as an attachment to **risimms@cabrillo.edu** using your regular (non-Opus) email.

**PLEASE VERIFY YOU ACTUALLY SENT A NON-BLANK,  
COMPLETED TEST TO BE GRADED!**

Everyone should submit their test (completed or not) by the end of class.

If you need extra time, you can submit again by no later than 11:59PM. Only the last submittal will be graded.

**Note to instructor:**

Email to students for Q14  
Make Sun-Hwa modifications

**Part 1 - Flashcards questions (1 point each)**

[Q1] What command shows the other users logged in to the computer?

[A1] \_\_\_\_\_

[Q2] What environment variable is used by the shell to determine which directories to search when locating a command?

[A2] \_\_\_\_\_

[Q3] What command can you use to "chat" with another user?

[A3] \_\_\_\_\_

[Q4] What command will show a hex dump of a binary data file?

[A4] \_\_\_\_\_

[Q5] Is `../guest/Poems` a relative or absolute pathname?

[A5] \_\_\_\_\_

## Part 2 – Sun-Hwa questions (1 point each)

From Opus, login to Sun-Hwa as follows: `ssh cislab\$\LOGNAME@sun-hwa`

[Q6] On Sun-Hwa, what text is displayed by the shell to prompt you for a command?

[A6] \_\_\_\_\_

[Q7] On Sun-Hwa, change to the `/etc/u` directory and keep descending into sub-directories until you can't go down any farther. There you will find some regular files. Which of these files contains exactly 5 words?

[A7] \_\_\_\_\_

[Q8] On Sun-Hwa, determine which of the `jin` and `sayid` commands is on your path today. For the one that is on your path, what is the inode number of the directory where it resides?

[A8] \_\_\_\_\_

[Q9] On Sun-Hwa, what is the absolute pathname for the `/etc/passwd` file?

[A9] \_\_\_\_\_

*Log out of Sun-Hwa so that you are back on Opus again.*

## Part 3 – Use P10-Hugo to answers the following questions (1 point each)

From Opus, login to P10-Hugo as follows: `ssh cis90@p10-hugo`

[Q10] On P10-Hugo, what is the name of the **smallest** file (either regular or symbolic link) in `/usr/bin`?

[A10] \_\_\_\_\_

[Q11] On P10-Hugo, when the shell processes a **ls /etc/ssh/\*pub** command, how many arguments are provided to the **ls** command when it runs?

[A11] \_\_\_\_\_

[Q12] On P10-Hugo, what is the absolute pathname of the directory where the **rtfm** command resides?

[A12] \_\_\_\_\_

[Q13] What command option directs the **diff** command to just **output version information and exit**?

[A13] \_\_\_\_\_

*Log out of P10-Hugo so that you are back on Opus again.*

**Part 4 – Use Opus to verify your answers to the following questions (1 point each)**

[Q14] Read your email on Opus. What is Benji's favorite **food**?

[A14] \_\_\_\_\_

[Q15] Calculate:  $2*(11^7+\text{sqrt}(289))-(38^5-9100*4430)-52118$

and email the answer to **rsimms** using the **mail** command.

[Q16] Does the **bc** command get its input from the command line, the keyboard or the operating system?

[A16] \_\_\_\_\_

[Q17] Starting in `/u` and descending down to the deepest sub-folder, what is name of the file whose inode is `394148`?

[A17] \_\_\_\_\_

[Q18] For your Opus account, which field (i.e. first, second, third, ... etc.) in `/etc/passwd` matches the output of `id -g`?

[A18] \_\_\_\_\_

[Q19] What is the `first` line of the `/usr/share/doc/pango-1.28.1/NEWS` file?

[A19] \_\_\_\_\_

[Q20] From your home directory, using a relative pathname with a single filename expansion character, what command would you use to classify all files in your `Miscellaneous` directory to check if they are text or binary files?

[A20] \_\_\_\_\_

[Q21] Of all the files represented by `/usr/share/doc/*/NEWS`, which is the `smallest`?

[A21] \_\_\_\_\_

[Q22] Of all the files represented by `/usr/share/doc/*/AUTHORS`, which has a modification date of `Jan 19, 2009`?

[A22] \_\_\_\_\_

[Q23] Of the regular files in the `/home/cis90/depot/filetypes` directory, which is a `JPEG image`?

[A23] \_\_\_\_\_

[Q24] With the following command line issued from your home directory, how many arguments are being specified?

```
ls -lid -St /boot Poems/Yeats/*
```

[A24] \_\_\_\_\_

[Q25] With the following command line, how many options are being specified?

```
echo /usr/bin/pi[cn]* /bin/[an]*t
```

[A25] \_\_\_\_\_

[Q26] What command would do a long listing of `/usr/bin` files whose names begin with a `j` or `q`?

[A26] \_\_\_\_\_

[Q27] Using only a long listing, what basic file type is `/bin/grep`?

[A27] \_\_\_\_\_

[Q28] How many lines are in `/etc/webalizer.conf` (the `webalizer` configuration file)?

[A28] \_\_\_\_\_

[Q29] What is the name of the kernel being run on Opus?

[A29] \_\_\_\_\_

[Q30] Who owns the `/etc/passwd` file?

[A30] \_\_\_\_\_

### Extra credit

[Q31] On Sun-Hwa, the **ttty** command has been compromised by forces on the island! What single command can you issue to fix this annoying behavior so you don't have to type name of the command backwards for it to work?

[A31] \_\_\_\_\_

[Q32] What command will make a prompt to show the current date, a space, a \$ and a space, using no more than 11 keystrokes?

e.g. On March 5th, the prompt would be: **Mon Mar 05 \$**

[A32] \_\_\_\_\_

[Q33] On Sun-Hwa, which shell program will be started for user **sawyer** (uid=**1235**) when that user logs into Sun-Hwa?

[A33] \_\_\_\_\_