Name:	Student ID #:

Lab #1 Solutions: COMP 3000B (Operating Systems) January 10 & 12, 2006

1. How do you get a listing of all the files in the current directory? (Note that files starting with a "." are hidden by default.)

ls -a

2. How do you create an empty directory named "foo"? **mkdir foo**

3. How do you delete a directory named "foo" and its entire contents?

rm -r foo or rm -rf foo

4. How do you make a file "bar" read-only to everyone?

chmod a-w bar removes read permissions for everyone (user, group, and other). **chmod 444 bar** makes the file readable by everyone, while **chmod 555 bar** makes the file readable and executable by everyone.

- 5. How do you copy the directory "foo" to "moo" such that the files in moo have the same names and contents as foo?
 - cp -r foo moo, assuming that moo doesn't already exist. cp -a foo moo also works.
- 6. For the directory copy command, are the last modified time stamps of the copy identical to the original? What command did you use to check this?
 - **cp** -**r** updates the last modified timestamps to the current time, so no they won't be the same. However, **cp** -**a** does preserve timestamps, so the last modified times would be identical. You can check the timestamps using **ls** -**l**.
- 7. How do you view the file /boot/System.map-2.6.8 one screen at a time? more /boot/System.map-2.6.8 or less /boot/System.map-2.6.8
- 8. How much total RAM does your machine have? How much swap space? The **top** command would give you this information (you didn't need to say this, however). There should have been approximately 512M of RAM and 1G of swap; the exact amount depended upon the computer's configuration.
- 9. Give a command line using the bash "for" command that creates zero-length files with the names 1 through 20 (i.e., 20 files).

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for x in 'seq 1 20'; do touch $x; done or for x in $(seq 1 20); do touch $x; done
```