

Fall 2006: CS 333 – UNIX Operating Systems Fundamentals

Homework – 3

75 points. Individual work only. Due November 3, 2006.

1. The command **ls** lists the files in a directory. Using UNIX commands create an alias named **lsd** that lists only the directories not the files (*i.e.*, if **lsd** is called inside **/home** it will list all the directories that are inside **home**). Note that **lsd** can not be used on directories that are not the current directory (*e.g.*, being in **/home/usr1** you can't list the directories in **/home/usr2**) [25 points]
2. For the following operations write down the command(s) used along with the options and the output produced: [25 points (5 points each)]
 - a. Create a file with the list of the files in your directory, name it **files** and change the permissions so that only you and other users from your group can modify it.
 - b. Using numerical permissions change the permissions of **files** so that the only users that can execute it are other users. You and users from your group can not read, write, nor execute it.
 - c. Change the permissions back so that you can read, and write; members of your group and other users can only read **files**.
 - d. Change the **umask** value so that new files that are created have only read permissions for you, members of your group, and other users. Create a file called **listingfiles** with the contents of your directory (similar to **files**)
 - e. Create a variable named NUM_FILES that holds the number of files in your home directory. The number of files should be calculated using UNIX commands.
3. For the following commands explain what action is performed: [25 points (5 points each)]
 - a. **sleep** 100 &
 - b. **split** -10 file1 f+; **cat** f+* > file2
 - c. **chmod** 700 myfile
 - d. **chown** user2 myfile
 - e. **cp** -p file1 file2

NOTE: Submit answers for *all questions* to me *by email* on the due date. 10 point penalty for every day late (weekends count as a single 24 hour period).