CIS 3003, Fundamentals of Information Technology Assigned: 10/16/2008
Fall 2008 __Assignment #5__ (**10 pts.**)   Due: 10/23/2008 in class
<mark>Note: Please see highlighted text added after class on 10/16/2008 and 12/4/2008.</mark>
Instructions: You must type up your answers for this assignment. The best way to do the
assignment is to have access to your own PC (or laptop), the Ubuntu CD, and a thumb drive
to save work, and access to a printer to print your work from the thumb drive. Be sure that
your answers represent your own work; no late assignments will be accepted unless prior
arrangements are made.

Use the instructor provided Ubuntu Linux CD to boot your own computer (laptop) into
Linux and perform the following tasks:
(0) Boot your PC or laptop into Ubuntu Linux by using the Ubuntu live CD and changing the
computer's boot sequence if necessary (to boot from CD before booting from the hard drive).
Choose the option of running Linux from the CD (the first option) at the initial screen.

(1) Once you are in Linux find out the man(ual) pages for the command "uname" (typing
the command man uname), and use it with proper option to output all system information
(of the Ubuntu Linux system) to a text file "uname.txt" using the output redirection
notation ">".
(2) Type out the contents of the text file "uname.txt" using the "cat" command:
        cat uname.txt
(3) Find out your working directory using the command:
        pwd (for print working directory.
(4) You may find out your "home" directory by the command:
        echo $HOME
(5) Make a subdirectory "dir1" under your current directory, using the command:
        mkdir dir1
(6) Similarly, a subdirectory "dir2" under your current directory, using the command:
        mkdir dir2
(7) Copy the file uname.txt to a copy (of the same name) but under the directory dir1, using
the command:
        cp uname.txt dir1/uname.txt
(8) Create a directory dir3 under dir1, by using the command:
        mkdir dir1/dir3
(9) Copy the entire directory tree (recursively) of dir1 (i.e., itself and all its
descendants) to under dir2, using the command:
        cp -r dir1 dir2
(10) Describe the files and directories under your current directory by drawing the
hierarchy of directories/files under your current directory.
(11) Use the "cd" command (change directory) to move to the subdirectory dir2/dir1
        cd dir2/dir1
(12) Use the following command to list all files under the current directory:
        ls -l
(13) Type the command "cd" to take you back to your home directory.
(14) Type the command "pwd" to show the current directory.

(15) Type the command "ls -ld" to show the output and to describe the permission bits settings for the current directory.

(16) Type the command "ls -l $HOME/uname.txt" and describe the permission settings for the text file.

(17) Show the command that can be used to allow only the "r" permission to owner (user), group, and others; no "w' or "x" permission allowed to anybody. Demonstrate the resulting permission settings by using the ls command as in (16).

(18) Use the command "mv uname.txt new.txt" to rename the file.

(19) Use the command "rm new.txt" to remove (i.e., delete) the file.

(20) Type "cd" to return to the home directory, and type the following command to recursively list all directories and files:

     ls –lR

Note (added 12/4/2008): The option flag used above is capital letter "R" for recursively listing the directories and files.

Note: To capture the output on the screen you could highlight, copy, then paste to an OO (opneOffice) document. Connect your thumb drive to the Ubuntu system, use the command "sudo mount" to see if the thumb drive is mounted. The thumb drive can be identified by using the command "sudo fdisk -lu" which gives a listing of attached devices including thumb drive. Mount the thumb drive if it is not already mounted, using the command "sudo mount -w /dev/sdb1" assuming the fdisk command identified /dev/sdb1 as the thumb drive. Once mounted as writable, you may save the OO document to the thumb drive. Be sure to umount the thumb drive before unplugging it, by using the command "sudo umount /dev/sdb1", or whatever the right syntax is for the sdb1 part. The OO document can then be open by Microsoft Word in Windows.