CSCI 211: Unix Lab

Homework 3

(Due February 22, 2016, 23:59:59PM)

Note:

1. You must rely on UNIX commands only to solve the problems. No manipulation on Windows is allowed (such as scrolling the PuTTY screen).
2. You must use a **single** command for each of the following operations unless specified otherwise.

Pre-step:

Run the command "source /lab3/quiz/prep.sh" exactly once.

1. Find out the latest date and time that the user "sycs211" logged in and the hostname that the user "sycs211" logged in from.
   Show the command(s) your used to achieve the goal: who or finger
   Show the date, time and hostname: (omitted)

2. Using one single command, find the program named 'hi' in the current directory tree (i.e. the current directory and its subdirectories and sub-subdirectories and so on).
   Show the command your used to achieve the goal: find . –name "hi" -print
   Show the path of 'hi': ~/lab3/two/subdir4/bin/hi

3. Show the environment variable PATH.
   Show the command(s) your used to achieve the goal: echo $PATH

4. Do some manipulations so that you can run the 'hi' program from anywhere without providing the path of 'hi'.
   Show the command(s) your used to achieve the goal:
   export PATH=$PATH:~/lab3/two/subdir4/bin/
   Show the report code provided by 'hi' after the successful manipulations: (omitted)

5. Using one single command with wildcard characters, copy all files that have ‘b’ as the second character and have ‘c’ as the second last (penultimate) character to the ‘tmp’ directory.
   Show the command your used to achieve the goal: cp ?b*c? tmp

6. List content of the ‘tmp’ directory.
   Show the command(s) your used to achieve the goal: ls tmp
   Show the content of the 'tmp' directory: ababcc abbcca

7. In the directory tree of "~/lab3", using one single command, find the files with "sycs" in their names.
   Show the commands your used to achieve the goal: find . –name "*sycs*" -print
   Show the names and paths (relative to ~/lab3) of the files found:

./sycsb
./bsycs
./one/subdir3/asycs.txt
./three/subdir3/subsubdir5/sycs.is.now.csci
./two/subdir2/subsubdir4/KVsYsycsq9bs

8. Without using an editor, find the lines in the file named "file.with.abcd" that contains the string "abcd". You need to do that in two different ways, using pipe and not using pipe.
   Show the command (not using pipe) your used to achieve the goal: grep –n "abcd" file.with.abcd
   Show the command (using pipe) your used to achieve the goal: cat file.with.abcd | grep –n "abcd"
   Show the found lines AND the line number of the lines:
   Line 380: abcdEFvBjeVljqDIikZm1RXM3w5HrNAOmg2lgvEWJu7QOJSGk87glh9GTlj6y69w
   Line 700: r2slsbMmbpemrCbwJ8ZuVmBXabcd1wXjt26oI5Cz5rD8XAEqg3iAGoVgF8QAzuE1

9. In the directory tree of "~/lab3", using one single command, find the files with the string "lost money" (case insensitive) in their content.
   Show the command your used to achieve the goal: grep –r -i "lost money" .
   Show the names and paths (relative to ~/lab3) of the files found:
   one/subdir2/subsubdir3/file4
   three/subdir1/file4
   two/subdir2/subsubdir4/file5

10. In the directory tree of "~/lab3", using one single command, find the files with a particular string in their content. The string starts with '@', followed by a capital letter, and then zero or more digits, and then one or more small letters, and ends with '@'.
    Show the command your used to achieve the goal: grep –r –E "@[A-Z][0-9]*[a-z]+@" .
    Show the names and paths (relative to ~/lab3) of the files found:
    file.with.abcd
    one/subdir3/subsubdir5/file4
    three/subdir1/file3

Post-steps:

1. **Run the command "source /lab3/quiz/wrapup.sh" exactly once.**
2. **Submit this file with your answers.**
   Save this file as yourlastname_yourfirstname_Lab3.rtf and then submit online at
   http://www.networks.howard.edu/lij/courses/2016/211/