CIS204 – 12296: UNIX Scripting & Utilities

Lecturer – Hugo Becker

Project #1 – Due Close of Business (17:00 – 5 pm) 9 Feb 2017

Submit your project in the body of an email (DO NOT SEND THE PROJECT EMBEDDED IN A MICROSOFT DOCUMENT) with the following subject line:

CIS204 - 12296 - Project 1

Do the following. We will have covered all of the elements of this project by the end of Week 3 lecture. The man page work can be started immediately.

1 – Describe the function of the following commands and their options in *your own words* (**DO NOT CUT AND PASTE FROM THE MAN PAGES** – I really want you to get in the habit of using and reading man pages, and trying the commands out).

Command: ps

Options: e,f,a,u,x

Command: sort

Options: k,n,r

Command: ls

Options: l,a,b

2 – The pointy-haired manager's good friend in marketing called him and said the system is way to slow today. Mr. Pointy-hair wants you to send him a file 'right now' with the top ten CPU using processes.

Work out a command structure that can be issued to find running processes, sort them by CPU utilization, and return only the top ten CPU utilizing processes to a file called, top_cpu_out.txt.

All I want is the command structure – you'll want to test it though and make sure it works before sending it to me.

- **3** Show the command(s) required to make a directory in your home directory called user01 with the user permissions of read, write, and execute, group permissions of read, and execute, and other permissions as no permissions.
- **4** Using the chmod command show how to restrict, 'user' access to read, write, execute; group access to read and execute, no write access; and the 'other' access to execute only. Build one chmod command using the octal modes and another chmod command using the symbolic modes.
- 5 Explain the setuid, setgid and sticky bits on file permission in your own words.

Please send your responses in an e-mail to: hbecker3@jccc.edu