HW # 4: Note: download internet (pdf) version of the course text book (if you haven't already): <u>http://linuxcommand.org/tlcl.php</u>

1. Open a new terminal and navigate to your home directory (cd ~). Create a new folder named HW4, and navigate into HW4.

2. From the HW4 folder, run the following commands: cat << \_EOF\_ > file1.txt unix is great os. unix is opensource. unix is a free os. learn the Linux operating system. Unix or Linux, which one you choose. uNix is easy to learn.unix is a multiuser os.Learn unix .unix is a powerful. mweir's 37751-9191 \_EOF\_

cat << \_EOF\_ > file2.txt macOs is a great os. macOs is not opensource. macOs is Unix, but macOs is not a free os. learn the Linux operating system. Unix or Linux, which one you choose. uNix is easy to learn.unix is a multiuser os.Learn unix .unix is a powerful. mwcorley's SUID is 34521-1122 \_EOF\_

cat << \_EOF\_ > file3.txt Windows is great os. Windows is not opensource. Windows is not a free os. Learn an operating system. Unix or Linux whichever one you choose. uNix is easy to learn.unix is a multiuser os.Learn unix .unix is a powerful. cpatch's SUID is unknown \_EOF\_

The above commands are examples of *here documents*, which you can read about it on page 379 in the class text: <u>here</u>

- 3. Using the files created in step 1. and 2. Write a command (or a script) to search and print all .txt files in the HW4 directory that contain an SUID number of the following format: XXXXX-XXXX. Hint: consider using grep with a regular expression to match the SUID format (the SUID regex isn't much different than the social security number regex discussed in the notes)
- 4. Write a command to *find* all of the text files in your HW4 folder (and any child folders), and for each file found, print the lines that contain the string "SUID". Hint: consider using the *find* and *grep* commands.

5. Write a shell script that implements a basic 4-four calculator (add, subtract, multiply, and divide)

The calculator should display a menu, and function similar to the screen shot below.

```
mwcorley@mwcorley-VirtualBox: ~/scripts
 File Edit View Search
                             Terminal Help
mwcorley@mwcorley-VirtualBox:~/scripts$ demoCalculate.sh
     Simple Calculator
1 - Add Numbers
2 - Subtract Numbers
     3 - Divide Numbers
4 - Multiply Numbers
     0 - Exit program
Enter selection: 1
Enter num1:
20
Enter num2:
10
Answer: 30
     Simple Calculator

    Add Numbers
    Subtract Numbers
    Divide Numbers

     4 - Multiply Numbers
     0 - Exit program
Enter selection: 2
Enter num1:
20
Enter num2:
10
Answer: 10
     Simple Calculator

    Add Numbers
    Subtract Numbers
    Divide Numbers

     4 - Multiply Numbers
     0 - Exit program
Enter selection: 4
Enter numl:
20
Enter num2:
10
Answer: 200
    Simple Calculator

    Add Numbers
    Subtract Numbers
    Divide Numbers

     4 - Multiply Numbers
     0 - Exit program
Enter selection: 0
mwcorley@mwcorley-VirtualBox:~/scripts$
```