

# EECS2032E

## Lab 1 Fall 2020

### Lab Objectives

In this lab, you will be introduced to the Linux operating system. The basic commands will be presented in this lab. By the end of you lab, the TA will ask you to demo some part of the lab.

### PreLab

Read the course slides, watch the zoom lecture. You may take a look at this tutorial <https://ryanstutorials.net/linuxtutorial/>

### Lab

Finally the command `script`. Script makes a copy of your terminal session (do `man script` for more details).

The way script works is as follows. When you type `script`, a file is created that will store every command you type and every thing that is displayed on the screen. So for example if you type `ls`, then the `ls` command together with the displayed results will be stored in the script file. You can specify the name of the file with the `script` command. If you did not specify the file, the default file is `typescript`. Do not forget to exit the scripting session using `exit` command.

An example is shown below.

```
tigger 106 % script myscriptfile
Script started, file is myscriptfile
tigger 101 % date
Fri Aug 14 14:55:34 EDT 2009
tigger 102 % exit
exit
Script done, file is myscriptfile
```

Starting the script, then you executed the `date` command, the result is shown on the screen

Exit to end the scripting session

Now, we are out of the scripting session, the contents is stored in a file called `myscriptfile`. Cat this file to see the contents of the session

```
tigger 107 % cat myscriptfile
Script started on Fri Aug 14 14:55:26 2009
tigger 101 % date
Fri Aug 14 14:55:34 EDT 2009
tigger 102 % exit
exit
```



```
Script done on Fri Aug 14 14:55:39 2009
tigger 108 %
```

Start a script called myscript. You have to do the following commands, and submit them with the script file. Use the man pages for more details about any command that you need. I will mention few commands that might help you (you don't have to use them, if you have a better idea, then do it).

1. Do "ls" in your main directory.
2. Do a simple command (or combination of commands using pipes) to count the number of files in your main directory that contains the letter A.
3. Use your favorite editor to create a new file called t1.txt. The file should contain few words (5-10 words are enough).
4. How many words in this file (you may use wc, or od)
5. Show if your file ends with a new line or not.
6. Use hexdump to view the file contents. What is the difference between od and hexdump (use man)
7. Show how the first character in your file is actually represented in binary

For 5,4,7 edit the script file to explain each point

Use man for any command you are not sure of

## **Deliverable**

1. NONE