

Assignment: Lab 1– Basic Linux commands

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CYSE 301

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Step 1:

```
Terminal - student@kali.example.com: ~
File Edit View Terminal Tabs Help
(student@kali.example.com)-[~]
$ ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host noprefixroute
        valid_lft forever preferred_lft forever
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 9001 qdisc mq state UP group default qlen 1000
    link/ether 02:60:70:7e:da:0b brd ff:ff:ff:ff:ff:ff
    inet 10.1.150.101/20 brd 10.1.159.255 scope global dynamic eth0
        valid_lft 3159sec preferred_lft 3159sec
    inet6 fe80::60:70ff:fe7e:da0b/64 scope link proto kernel_ll
        valid_lft forever preferred_lft forever
```

```
(student@kali.example.com)-[~]
$ hostname -I
10.1.150.101
```

For this step I used the commands “ip a” as well as the command “hostname -I” to display the network information of my Linux machine including my ip address or just my ip address.

Step 2:

```
(student@kali.example.com)-[~]
$ pwd
/home/student
```

The command “pwd” show my current directory I am working in to ensure that the work I am doing is within the write area.

Step 3-4:

```
(student@kali.example.com)-[~]  
$ echo "Justin White"  
Justin White  
  
(student@kali.example.com)-[~]  
$ echo -e "Justin\nWhite"  
Justin  
White
```

I used the “echo” command to print my name in the terminal on a single line. While I used the “echo -e xxx\nxxx” command to ensure that my name was split onto two separate lines.

Step 5:

```
(student@kali.example.com)-[~]  
$ cd ~  
  
(student@kali.example.com)-[~]  
$ cd /home/student
```

I navigated to my home directory using the “cd” command both with the shortcut “~” and the full absolute path.

Step 6:

```
(student@kali.example.com)-[~]  
$ cd ~  
  
(student@kali.example.com)-[~]  
$ touch forjwhit216.txt  
  
(student@kali.example.com)-[~]  
$ ls -l  
total 32  
drwxr-xr-x 2 student student 4096 May  8 01:57 Desktop  
drwxr-xr-x 2 student student 4096 May  8 01:57 Documents  
drwxr-xr-x 2 student student 4096 May  8 01:57 Downloads  
drwxr-xr-x 2 student student 4096 May  8 01:57 Music  
drwxr-xr-x 2 student student 4096 May  8 01:57 Pictures  
drwxr-xr-x 2 student student 4096 May  8 01:57 Public  
drwxr-xr-x 2 student student 4096 May  8 01:57 Templates  
drwxr-xr-x 2 student student 4096 May  8 01:57 Videos  
-rw-rw-r-- 1 student student   0 May 26 19:58 forjwhit216.txt  
drwx----- 1 student student   0 May 26 19:46 thinclient_drives
```

I created a file named “forjwhit216.txt” using the “touch” command. The command “ls -l” outputs the size of the files. The size of the file displays 0 because it is an empty file.

Step 7:

```
(student@kali.example.com)-[~]  
$ cd ~  
  
(student@kali.example.com)-[~]  
$ mkdir jwhit216  
  
(student@kali.example.com)-[~]  
$ ls -l  
total 36  
drwxr-xr-x 2 student student 4096 May  8 01:57 Desktop  
drwxr-xr-x 2 student student 4096 May  8 01:57 Documents  
drwxr-xr-x 2 student student 4096 May  8 01:57 Downloads  
drwxr-xr-x 2 student student 4096 May  8 01:57 Music  
drwxr-xr-x 2 student student 4096 May  8 01:57 Pictures  
drwxr-xr-x 2 student student 4096 May  8 01:57 Public  
drwxr-xr-x 2 student student 4096 May  8 01:57 Templates  
drwxr-xr-x 2 student student 4096 May  8 01:57 Videos  
-rw-rw-r-- 1 student student   0 May 26 19:58 forjwhit216.txt  
drwxrwxr-x 2 student student 4096 May 26 20:00 jwhit216  
drwx----- 1 student student   0 May 26 19:46 thinclient_drives
```

I created a folder named after my MIDAS ID using the command “mkdir” which created a directory. After I used the command “ls -l” which shows the files and directories also displaying the size which is 4096 bytes.

Step 8:

```
(student@kali.example.com)-[~]  
$ cd ~  
  
(student@kali.example.com)-[~]  
$ cp /etc/passwd passwd_jwhit216  
  
(student@kali.example.com)-[~]  
$ head -n 6 passwd_jwhit216  
root:x:0:0:root:/root:/bin/bash  
daemon:x:1:1:daemon:/usr/sbin:/usr/sbin/nologin  
bin:x:2:2:bin:/bin:/usr/sbin/nologin  
sys:x:3:3:sys:/dev:/usr/sbin/nologin  
sync:x:4:65534:sync:/bin:/bin/sync  
games:x:5:60:games:/usr/games:/usr/sbin/nologin  
  
(student@kali.example.com)-[~]  
$ grep "www" passwd_jwhit216  
www-data:x:33:33:www-data:/var/www:/usr/sbin/nologin  
  
(student@kali.example.com)-[~]  
$
```

I copied the command “/etc/passwd” to my home folder with a new name. Then used the command “head” to display the first six lines which I then used the “grep” command to search for entries containing “www”.