OLD DOMINION UNIVERSITY

CYSE 301 CYBERSECURITY TECHNIQUES AND OPERATIONS

Assignment Lab #0 Using Command Line Interface

John Wilson

01179411

TASK A (6 PT X 5 = 30 PTS)

1. Print your name and MIDAS ID to the terminal.

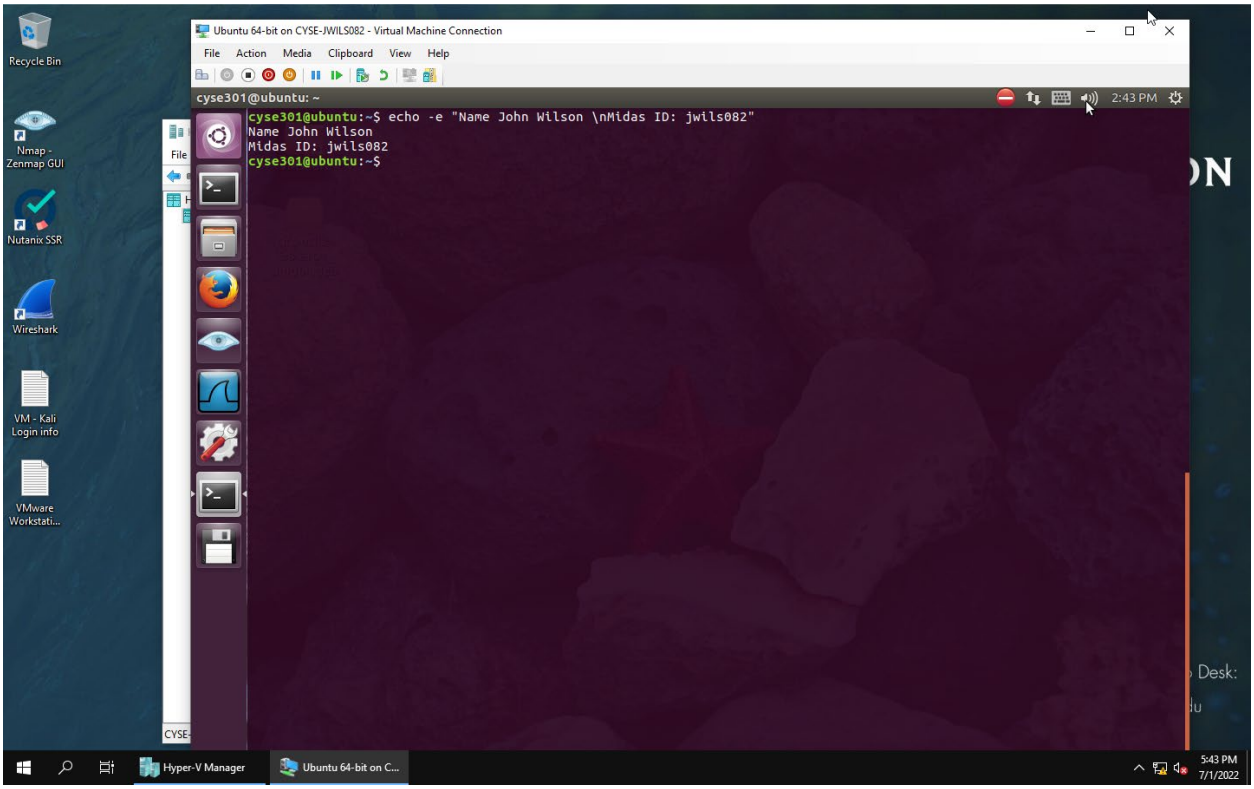

Figure 1. Example Screenshot for task A.1

- To print your name and Midas Id on the screen I used the command “echo -e “Name: John Wilson \nMidas ID: jwils082”. The command “echo” prints out or displays the line of text that is passed as an argument. The argument “-e” is a tool that allows the user to manipulate the display on the screen. In this instance I separated the name and the MIDAS ID using the argument “\n” which allows you to display the information on different lines.

2. Navigate to the /etc directory by using the absolute pathname and print the current working directory.

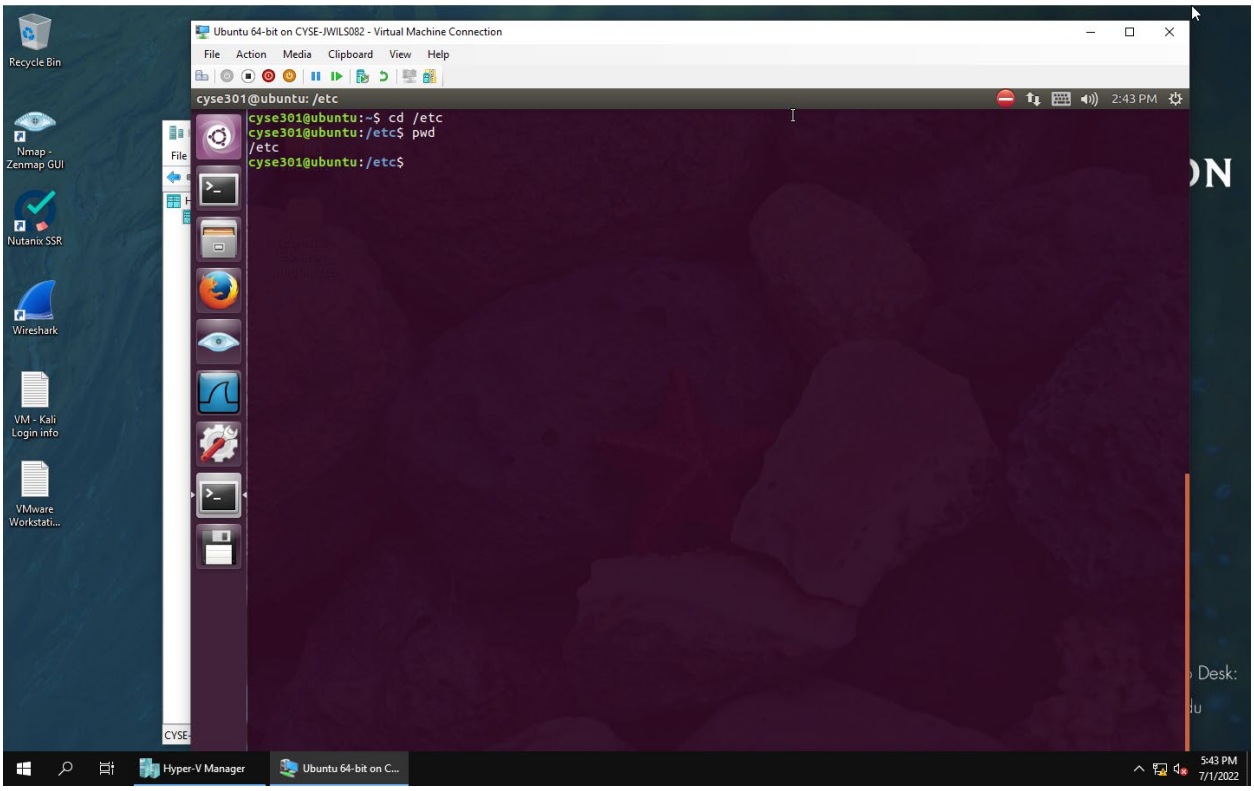

Figure 2. Example Screenshot for task A.2

- To navigate to the "/etc" directory using an absolute path you use the command "cd /etc". the command "cd" is used to change the current working directory, or it can take you back to the root directory. In this case it is used to change to the "/etc" directory. The argument "/etc" is the directory to where you want to go and because there is a "/" in front of the argument means that this is the absolute path to the directory.
- I also used the command "pwd" to display and affirm the current working directory is "/etc". The command "pwd" prints the path to the current working directory.

3. Navigate to the /etc/skel directory by using the relative pathname and print the current working directory.

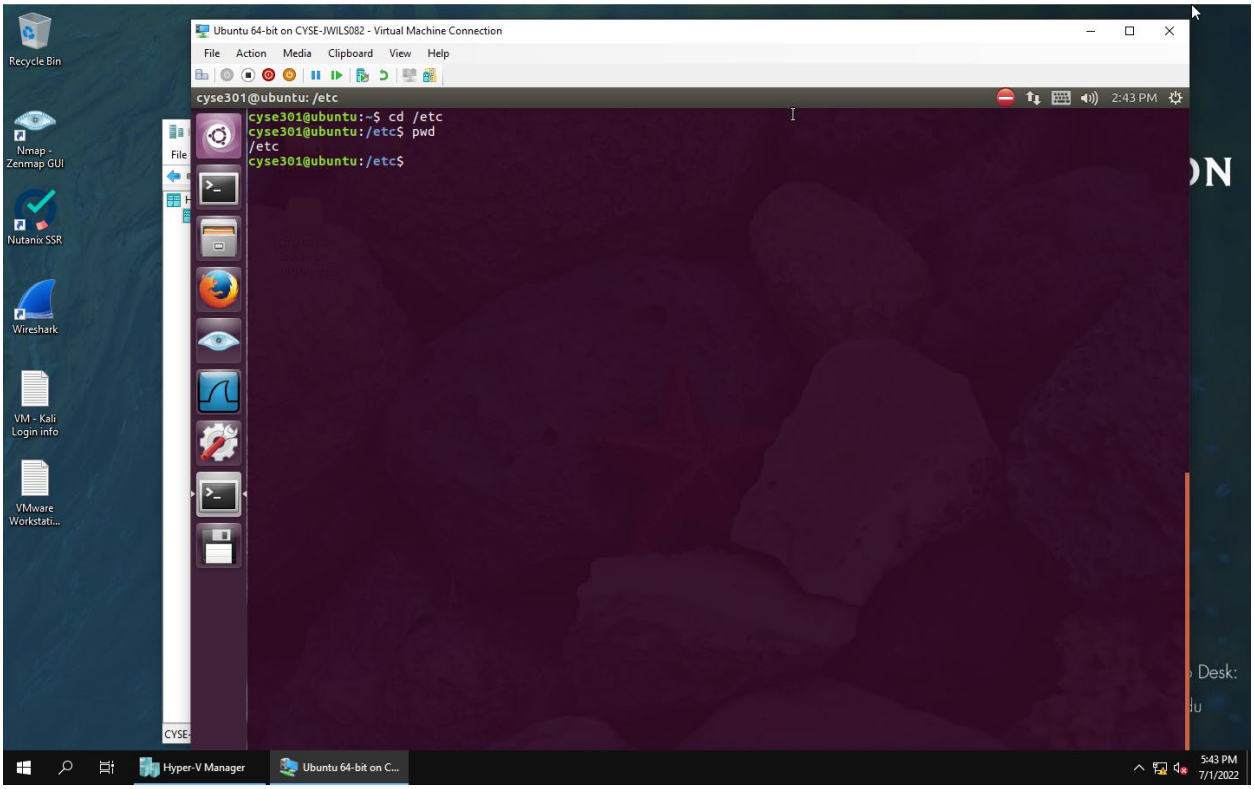

Figure 3. Example Screenshot for task A.3

- To navigate to the "/etc/skel" directory using a relative path you use the command "cd ../etc/skel". The command "cd" is used to change the current working directory, or it can take you back to the root directory. In this case it is used to change to the "/etc" directory. The argument "../etc/skel" is the relative path to the directory to where you want to go because there is not a "/" in front of the argument. With no "/" in the front defines this as the relative path to the directory.
- I also used the command "pwd" to display and affirm the current working directory is "/etc". The command "pwd" prints the path to the current working directory.

4. Perform a “long display” listing of the ALL files in the current directory.

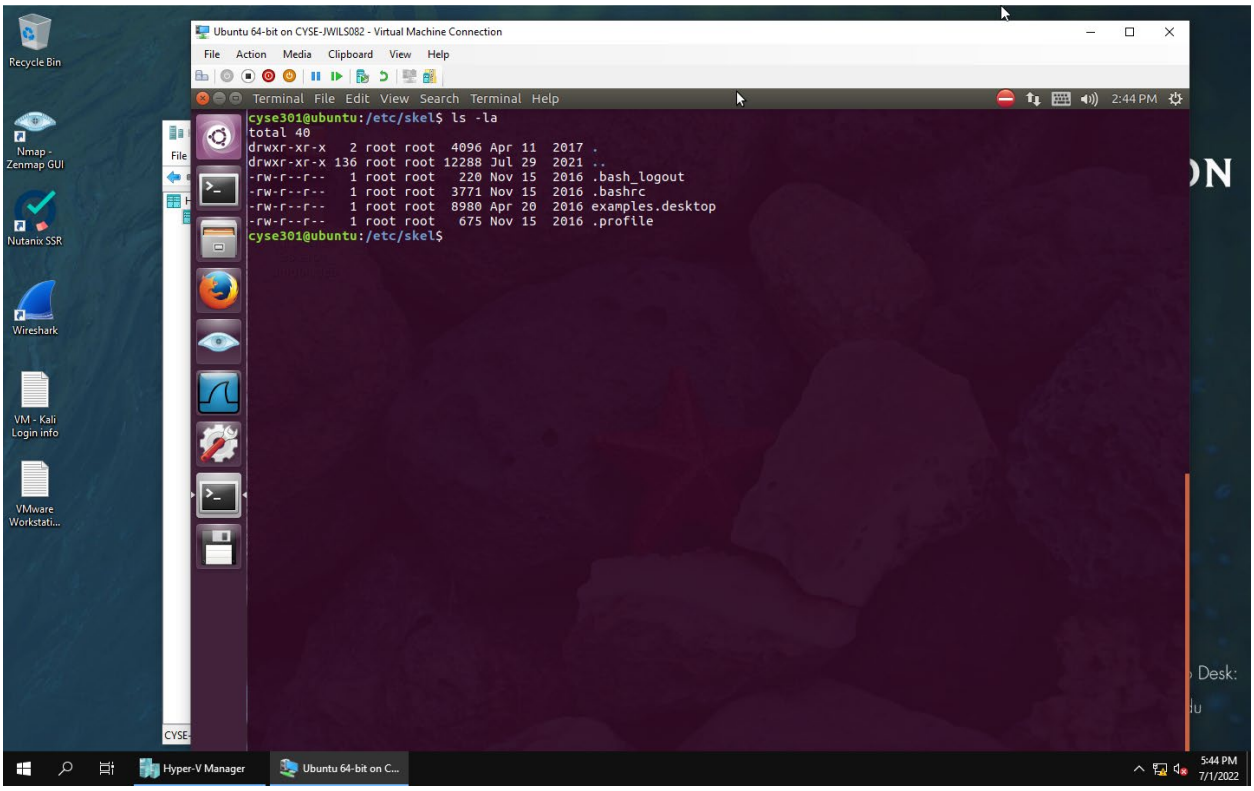

Figure 4. Example Screenshot for task A.4

- To display a long list of all the files in the current directory (which is “/etc/skel” directory” you use the command “ls -la”. The command “ls” is used to display or list the files in the current directory. The arguments “-l” lists the permissions, owners, and timestamps of the files in the directory. The argument “-a” lists all the hidden files (that are hidden by a single (.) or double (..) period) in the directory.

5. Ping 127.0.0.1 and terminate the process after 10 seconds.

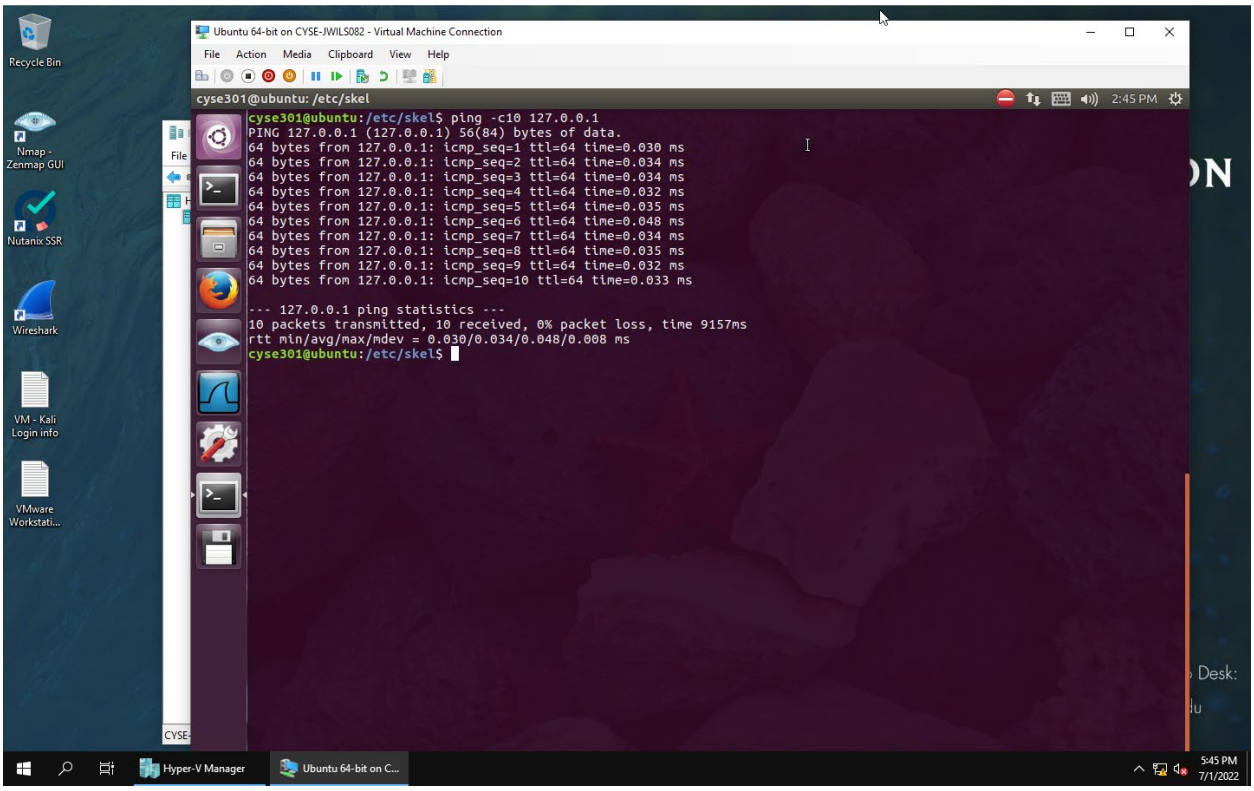

Figure 5. Example Screenshot for task A.5

- To Ping the ip address 127.0.0.1 ten times you can do this a couple of ways. You can use the command “ping 127.0.0.1” and then hit ctrl^c after you receive ten packets to exit the execution of the ping program. Or you can use the command “ping -c10 127.0.0.1” that will automatically stop the execution of the ping operation after 10 pings. In the above screen shot I used the command “ping -c10 127.0.0.1” because it made more sense to me. The command “ping” is used to send packets to a specific ip address show you if the connection was successful and how long the communication took. The argument “-c10” tells

TASK B (7PT X 10 = 70 PTS)

1. Navigate to your home directory.

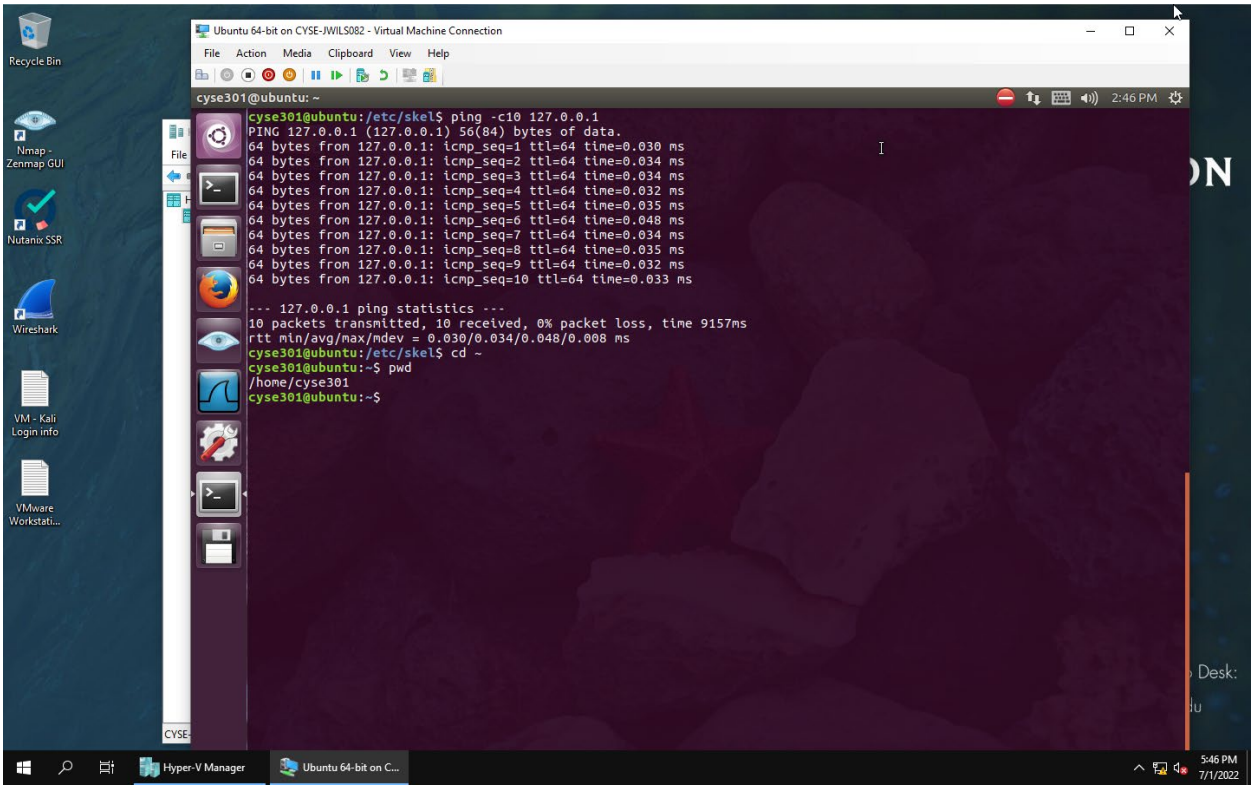

Figure 1. Example Screenshot for task B.1

- To return (navigate) to your home directory you use the command “cd” or “cd ~”. In this instance I used the command “cd ~” to return to my home directory. The command “cd” is used to change the current working directory, or it can take you back to the root directory.
- I also used the command “pwd” to verify that the directory was changed to my (users) home directory.

2. Make a directory named “**Your_MIDAS**” in your home directory. For example, pjian001.

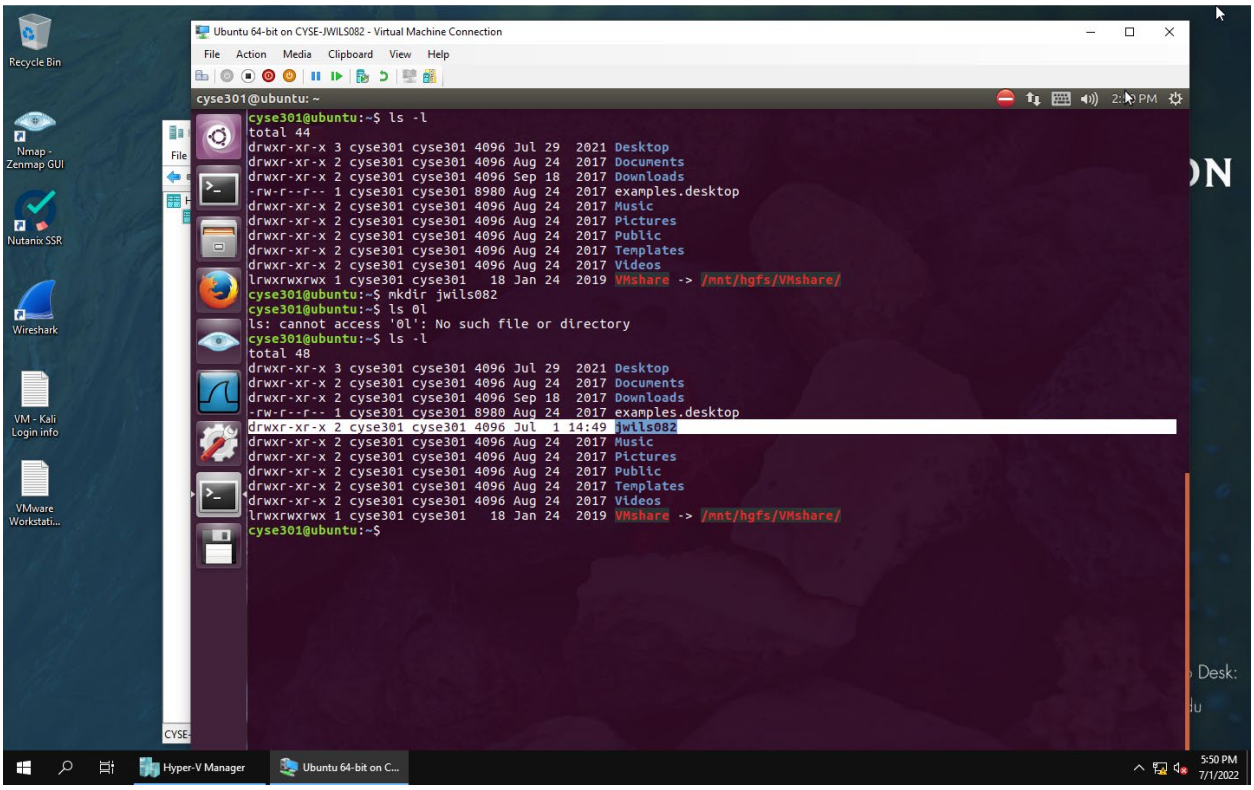

Figure 2. Example Screenshot for task B.2

- To make a directory named jwils082 (my MIDAS ID) I used the command, “mkdir jwils082”. The command “mkdir” allows the user to create new directories. The argument “jwilson082” is the name provided to the new directory.
- I also used the command “ls -la” to verify that the new directory was made with the name “jwils082”.

3. Copy the **/etc/passwd** file to the directory created in the previous step.
4. **Navigate** to the new directory (/home/cyse301/ **Your_MIDAS**) and display the content in this directory.

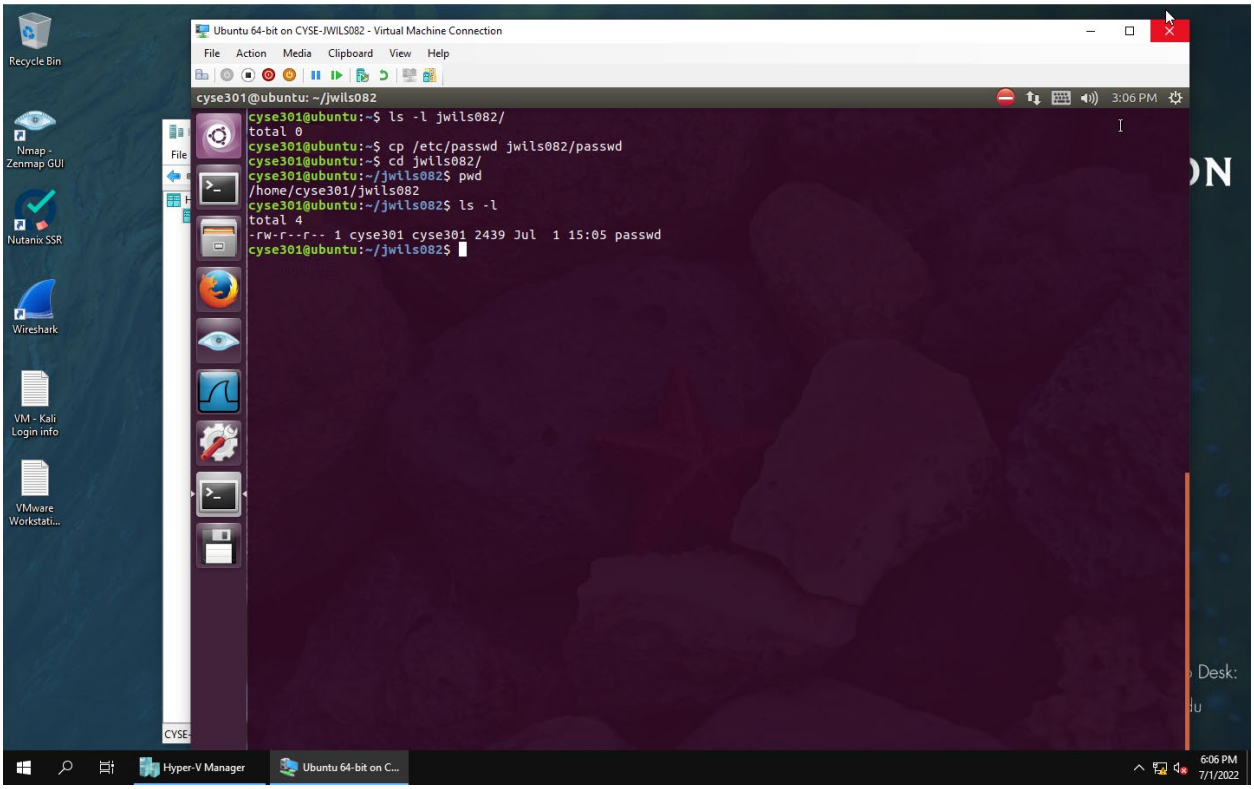

Figure 3. Example Screenshot for task B.3 and B.4

- To copy the file “passwd” from the directory “/etc” and place the copy into the new directory “/home/cyse301/jwils082” I used the command “cp /etc/passwd jwilson082/passwd”. The command “cp” is the instruction to copy any files. The first arguments “/etc/passwd jwils082/passwd” tells the computer to copy the file name “passwd” located in the directory “/etc” and place it in the directory “jwils082” with the name “passwd”.
- I navigated to the new directory “jwils082” by using the command “cd jwils082/”. The command “cd” is used to change the current working directory and in this case, I used it to change to the directory “jwils082/” as instructed.
- I then used the command “ls -l” to verify that the copy named “passwd” was made and place in the new directory “jwils082”.

5. Make a backup copy of the **passwd** file in this directory.
6. Perform a “long display” listing of the **ALL** files in this directory.

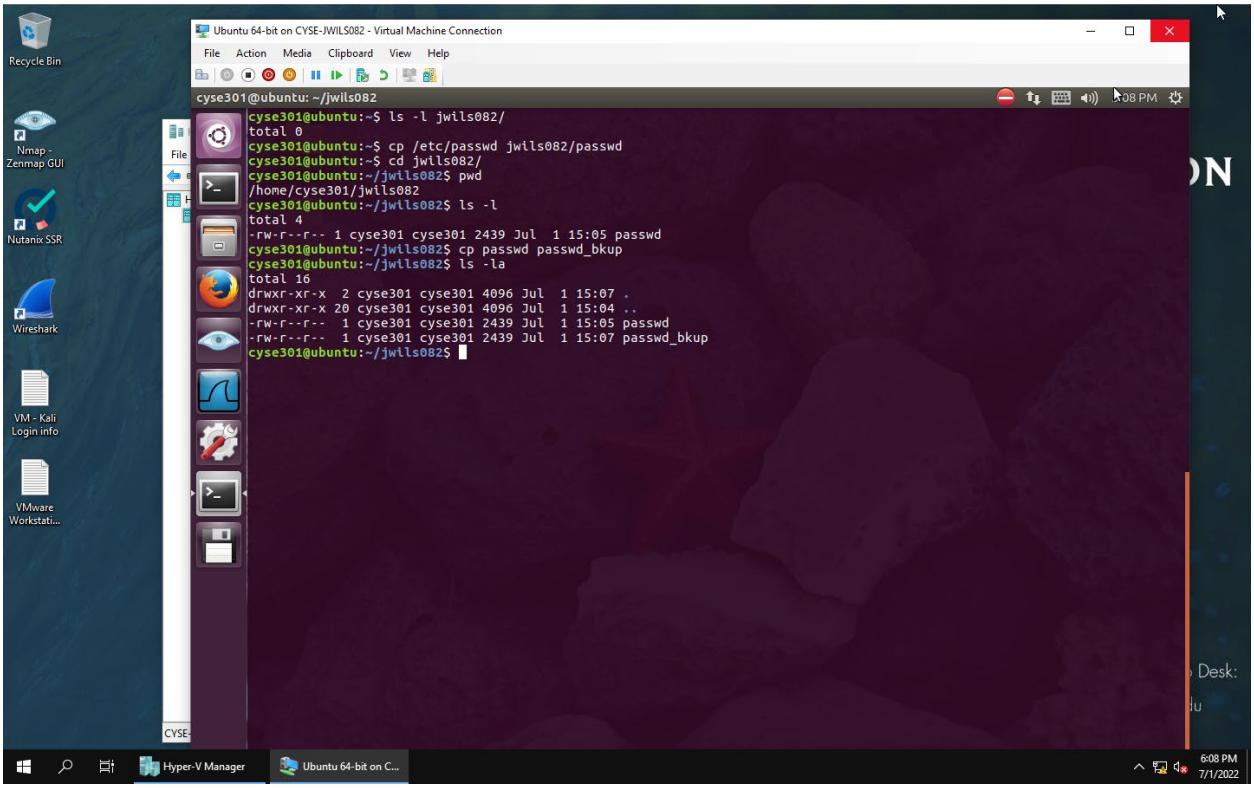

Figure 4. Example Screenshot for task B.5 and B.6

- To make a backup copy of the file “passwd” I used the command “cp passwd passwd_bkup”. The command “cp” is the instruction to copy any files. The arguments “passwd passwd_bkup” tells the computer to copy the file name “passwd” located in the directory “jwils082/” and place it in the directory “jwils082/” with the name “passwd_bkup”. This did not require me to input any relative or absolutes paths as I was already inside the directory “jwils082/”.
- I then used the command “ls -la” to verify that the copy named “passwd_bkup” was made and place in the directory “jwils082”.

7. Display the first 8 lines of both passwd file and the backup copy.

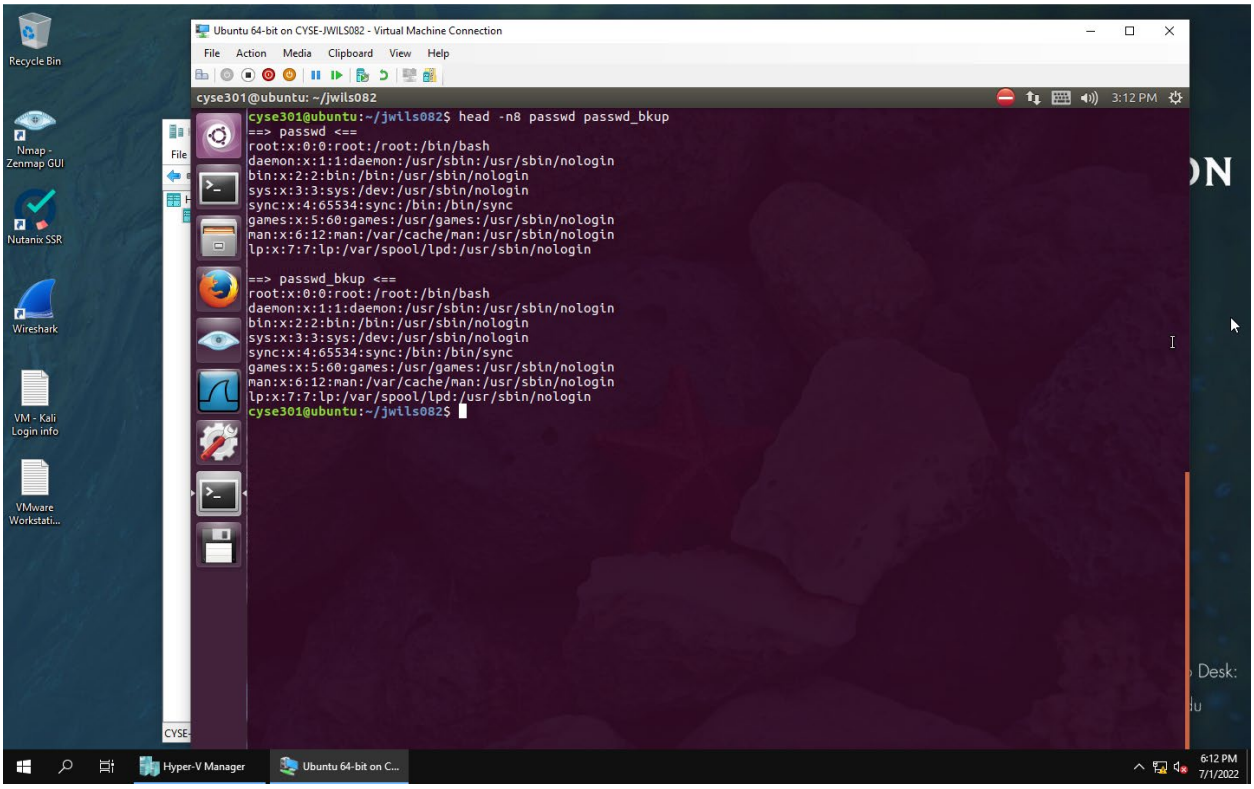

Figure 5. Example Screenshot for task B.7

- To display the first 8 lines of both files I used the command “head -n8 passwd passwd_bkup”. The command “head” is the instruction that tells the computer to retrieve the data that resides at the beginning of the file. The argument “-n8” only retrieves the first 8 lines of data in each file. I also placed both file names “passwd passwd_bkup” to see if the system would read both without having to do two different commands. And it did read both files and provide only 8 lines of information.

8. Search “root” in the passwd file.

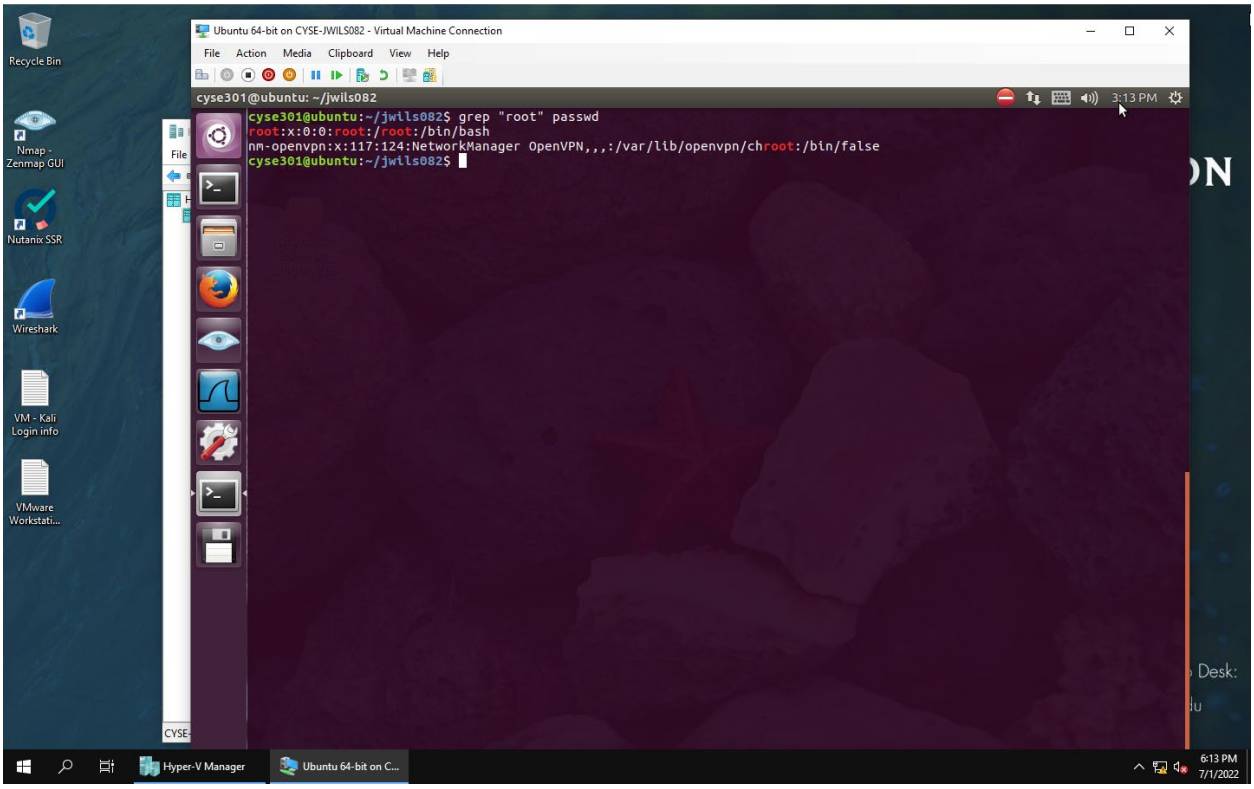

Figure 6. Example Screenshot for task B.8

- To search for the word “root” in the passwd file I used the command “grep “root” passwd”. The command “grep” is a filter instruction that will search for any string of words that you input as an argument. The argument “root” is the word I am searching for inside the file “passwd”. And as you can see it can back with the appropriate response.

9. Delete the **passwd** file
10. Perform a “long display” listing of the **ALL** files in this directory.

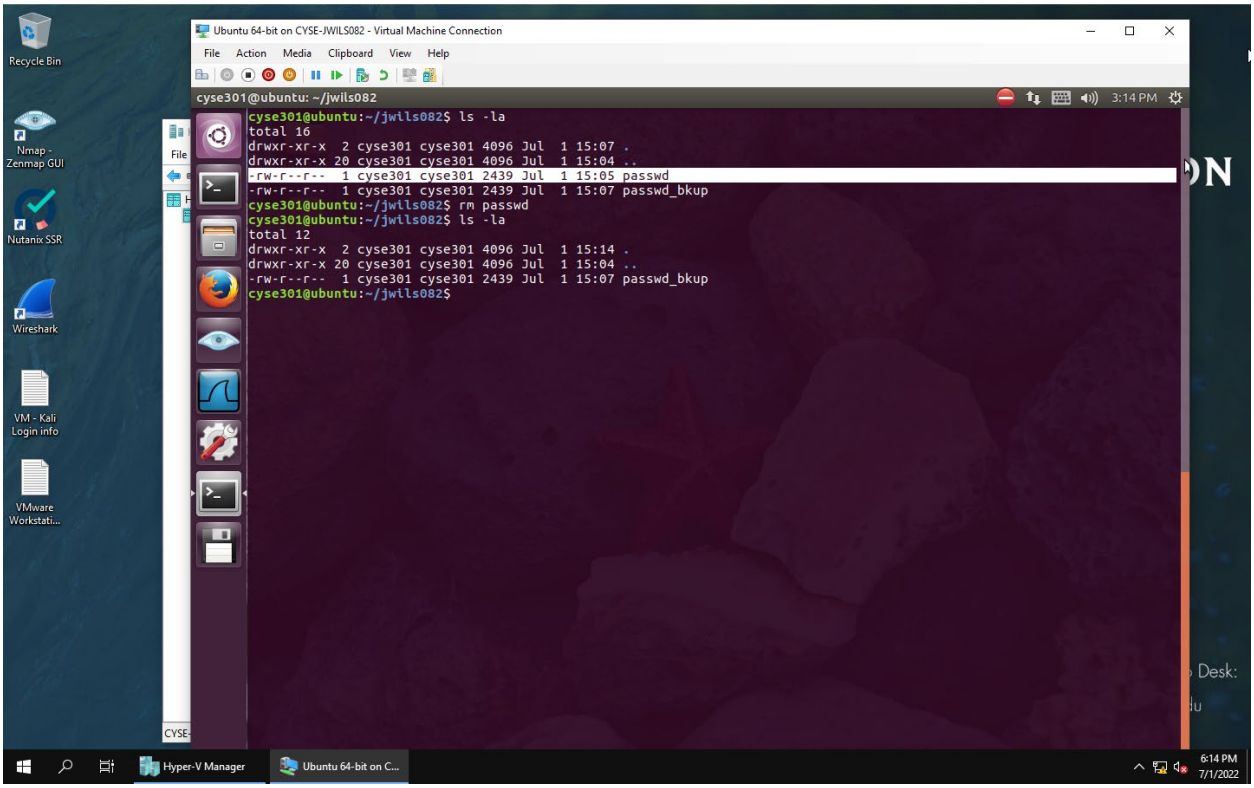

Figure 7. Example Screenshot for task B.9 and B.10

- To delete the passwd file I used the command “rm passwd”. The command “rm” is an instruction that removes (deletes) a file. The argument “passwd” is the file I wanted to delete or remove.
- I then used the command “ls -la” to verify that the copy named “passwd” was deleted from the directory “jwils082”. The only file that remains in the directory is “passwd_bkup”.