

CYSE 609 – FUND LINUX SYST FOR CYBER

Module 2 | Linux Basic Commands

Total: 100 Points

Name: [Click or tap here to enter text.](#)

Directions: Practice the following tasks in Linux VM – Ubuntu using various Linux commands for file management. Insert screenshots where applicable. Upload completed document in Canvas.

Task 1: ls command

- Use `ls -l` to display detailed information about the files in your home directory. Upload the screenshot for this step after executing the command.

```
ubuntu@ubuntu:~$ ls -l
total 0
drwxr-xr-x 2 ubuntu ubuntu 60 Feb  2 03:33 Desktop
drwxr-xr-x 2 ubuntu ubuntu 40 Feb  2 03:34 Documents
drwxr-xr-x 2 ubuntu ubuntu 40 Feb  2 03:34 Downloads
drwxr-xr-x 2 ubuntu ubuntu 40 Feb  2 03:34 Music
drwxr-xr-x 2 ubuntu ubuntu 40 Feb  2 03:34 Pictures
drwxr-xr-x 2 ubuntu ubuntu 40 Feb  2 03:34 Public
drwxr-xr-x 2 ubuntu ubuntu 40 Feb  2 03:34 Templates
drwxr-xr-x 2 ubuntu ubuntu 40 Feb  2 03:34 Videos
drwx----- 4 ubuntu ubuntu 80 Feb  2 03:34 snap
ubuntu@ubuntu:~$
```

- Use `ls -l` to display detailed information about the files in `/etc` directory. Upload the screenshot for this step after executing the command.

```
Desktop Documents Downloads Music Pictures Public Templates Videos snap
ubuntu@ubuntu:~$ ls -l /etc
total 465
drwxr-xr-x 4 root root    55 Oct 16  2023 ModemManager
drwxr-xr-x 7 root root   143 Oct 16  2023 NetworkManager
drwxr-xr-x 2 root root    57 Oct 16  2023 PackageKit
drwxr-xr-x 2 root root    34 Oct 16  2023 UPower
drwxr-xr-x 1 root root    33 Oct 16  2023 X11
-rw-r--r-- 1 root root  3444 Jul  5  2023 adduser.conf
drwxr-xr-x 3 root root    29 Oct 16  2023 alsa
drwxr-xr-x 1 root root    86 Oct 16  2023 alternatives
-rw-r--r-- 1 root root   335 Jul 26  2023 anacrontab
-rw-r--r-- 1 root root   433 Mar 23  2022 apg.conf
drwxr-xr-x 5 root root    65 Oct 16  2023 apm
drwxr-xr-x 3 root root    46 Oct 16  2023 apparmor
drwxr-xr-x 1 root root   110 Oct 16  2023 apparmor.d
drwxr-xr-x 1 root root    60 Oct 16  2023 appport
-rw-r--r-- 1 root root   833 Apr 26  2023 appstream.conf
drwxr-xr-x 1 root root   100 Feb  2  03:33 apt
drwxr-xr-x 3 root root    97 Oct 16  2023 avahi
-rw-r--r-- 1 root root  2319 Jan  7  2023 bash.bashrc
-rw-r--r-- 1 root root    45 Jan 24  2020 bash_completion
-rw-r--r-- 1 root root   367 Aug  2  2022 bindresvport.blacklist
```

- What are the security implications of using the ls command? How can it be configured to display only specific file attributes? Type your answer in **3 to 5** sentences here.

Task 2: pwd command

- Use pwd command to confirm your new working directory. Upload the screenshot for this step after executing the command.

```
ubuntu@ubuntu:~$ pwd
/home/ubuntu
ubuntu@ubuntu:~$
```

- What are the potential security vulnerabilities associated with the pwd command and how can they be mitigated? Type your answer in **3 to 5** sentences here.

Task 3: echo command

- Use the echo command to display a greeting message with your username. Take the screenshot for this step after executing the command.

```
ubuntu@ubuntu:~$ echo xtradv
xtradv
ubuntu@ubuntu:~$
```

- Redirect the output of the echo command to a new file named "greeting.txt" in your home directory. Take the screenshot for this step after executing the command.

```
xtradvs
ubuntu@ubuntu:~$ echo "Hello, Im Xavier" > ~/greeting.txt
ubuntu@ubuntu:~$
```

Task 4: cd command

- Use cd command to change the directory to /etc. Take the screenshot for this step after executing the command.

```
ubuntu@ubuntu:~$ echo "Hello, Im Xavi
ubuntu@ubuntu:~$ cd /etc
ubuntu@ubuntu:/etc$
```

Task 5: Pattern searching using grep command

- Use the grep command to search for your username within the contents of the "/etc/passwd" file.

```
ubuntu@ubuntu:/etc$ grep ubuntu /etc/passwd
ubuntu:x:1000:1000:Live session user,,,:/home/ubuntu:/bin/bash
ubuntu@ubuntu:/etc$
```

- Display the lines containing "your username." Take the screenshot for this step after executing the command.

```
ubuntu@ubuntu:/etc$ grep ubuntu /etc/passwd
ubuntu:x:1000:1000:Live session user,,,:/home/ubuntu:/bin/bash
ubuntu@ubuntu:/etc$
```

Grading Criteria

Task 1: ls command [3 subtasks x 10 = 30 Points]

Task 2: pwd command [2 subtasks x 10 = 20 Points]

Task 3: echo command [2 subtasks x 10 = 20 Points]

Task 4: cd command [1 subtask = 10 Points]

Task 5: Pattern searching using grep command [2 subtasks x 10 = 20 Points]

