**EXERCISE 1**

1. Move into the current user’s home directory using the **cd** command.
2. List the contents of **/etc** using the **ls** command and an absolute path.
3. Display the contents of **/var/log/dmesg**using the **cat** command and an absolute path.
4. Move into the root directory (**/**) using an absolute path.
5. List the contents of **/etc** using the **ls** command and an absolute path.
6. Move into the current user’s home directory using the **cd** command and an absolute path.
7. List the contents of **the current directory** using the **ls** command and a relative path.
8. List the contents of **/home** using the **ls** command and an absolute path.
9. List the contents of **/home** using the **ls** command and a relative path.
10. List the contents of **/etc** using the **ls** command and an absolute path.
11. List the contents of **/etc** using the **ls** command and a relative path.
12. Display the contents of **/var/log/dmesg**using the **cat** command and an absolute path.
13. Display the contents of **/var/log/dmesg**using the **cat** command and a relative path.
14. Move into the root directory (**/**) using the **cd** command and an absolute path.
15. Display the contents of **/var/log/boot.log**using the **cat** command and a relative path.
16. Run the previous command as root.
17. Move to**/var/log** directory using an absolute path.
18. Display the contents of the **Desktop**directory using both an absolute and relative path.
19. Display the man page of **ls** and search for **-d** option.
20. Display the contents of**/var/log** using a long listing format.
21. Display information about the**/var/log** directory in a long listing format.
22. Display the contents of **/etc** on a single column.
23. Display all the files and directories (including hidden ones) from the user's home directory.
24. Display the contents of**/var/log** sorted by size in a human-readable format.
25. Rerun the previous command adding an option that omits the files that end in**.log** from listing.
26. List the contents of **/etc** recursively.
27. Create a new file called**linux.txt** in the user’s home directory using the touch command.
28. Notice the file timestamps using both **stat**and **ls**commands.
29. Display the entire timestamp of the file using the ls command.
30. Consider the file created in the previous step. Notice its timestamps and then update them to the system’s current date and time.
31. Change only the modification and change time to the current system time. See the change.
32. Change only the modification time manually to **1990, January 15, 10:30:55 AM**.
33. Consider the file called **linux.txt**created in the previous step. Notice its timestamps and then update them to the values of **/etc/passwd**. See the changes.
34. List the contents of**/var/log** displaying the access time of the files and sorting by filenames in reverse order.
35. Notice and try to recognize all Linux file types by running**ls -l**, **ls -F** and **file**commands.

Run the commands on the following files:

/etc/passwd

/var

/vmlinuz

/usr/bin/ls

/dev/sda1

/dev/tty1

/run/initctl

/run/snapd.socket

1. List the contents of**/var/log/dmesg** using the **cat**command and display the line numbers as well.
2. Display the contents of**/etc/ssh/ssh\_config** page by page using **less**.
3. Go to the end and then to the beginning of the file using the right shortcuts.
4. Search forward for the string **Ciphers**
5. Quit less
6. Display the first 3 lines of **/etc/passwd**
7. Display the last 5 lines of **/etc/shadow**
8. Display the contents of **/etc/group** starting with line 5
9. Display the last 12 lines of **/var/log/auth.log** in real-time.
10. Become root in another terminal and notice how the display is automatically updated.
11. Display the contents of the user’s home directory repeatedly every 2 seconds.
12. Create a new file in the user's home directory and notice the differences between the refreshes.