

Lab No: 14

Date: 2082/

Title: Prepare a lab report for basic Linux command.

Linux commands are instruction lines typed in the terminal that enable users to interact directly with the operating system. They are not restricted to file handling or directory navigation but also cover areas such as system monitoring, process control, permission handling, and network tasks. These commands play a crucial role in fields like cloud platforms and cybersecurity.

1. pwd: It stands for Print Working directory. It is used to display the current working directory.

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

2. ls: Lists files and folders in the present directory.

```
yunish@yunish:~$ ls
Desktop    Downloads  Music      pt         snap
Documents  miniconda3 Pictures    Public     Templates
```

3. cd: Changes the working directory.

```
yunish@yunish:~$ cd os
yunish@yunish:~/os$
```

4. mkdir: Creates a new directory.

```
yunish@yunish:~$ mkdir os
yunish@yunish:~$ ls
Desktop    Downloads  Music  Pictures  Public
Documents  miniconda3 os       pt        snap
```

5. rmdir: Deletes an empty directory.

```
yunish@yunish:~$ ls
Desktop  Downloads  Music  Pictures  Public  Templates
Documents  miniconda3  os      pt      snap    Videos
yunish@yunish:~$ rmdir os
yunish@yunish:~$ ls
Desktop  Downloads  Music  pt      snap    Videos
Documents  miniconda3  Pictures  Public  Templates
yunish@yunish:~$
```

6. touch: Creates a blank file or updates timestamps.

```
yunish@yunish:~/os$ touch yunish.txt
yunish@yunish:~/os$ ls
yunish.txt
```

7. cat: Displays or combines file contents.

```
yunish@yunish: ~/os
yunish@yunish:~/os$ cat yunish.txt
My name is Yunish
```

8. nano: Opens the Nano text editor in the terminal.

```
yunish@yunish:~/os$ nano yunish.txt
```

Nano Shortcuts:

- Ctrl + O → Save the file (then press Enter to confirm).
- Ctrl + X → Exit the editor.

```
yunish@yunish: ~/os
GNU nano 7.2 yunish.txt *
My name is Yunish
```

9. mv: Moves or renames files and directories.

```
yunish@yunish:~/os$ mv yunish.txt os.txt
yunish@yunish:~/os$ ls
os.txt
```

10. rm: Removes files or directories.

```
yunish@yunish:~/os$ rm os.txt
yunish@yunish:~/os$ ls
yunish@yunish:~/os$
```

11. echo: Prints text or variables to the terminal.

```
yunish@yunish:~/os$ echo yunish
yunish
```

12. grep: Searches for patterns in text or files.

```
yunish@yunish:~/os$ grep a yunish.txt
My name is Yunish
```

13. history: Shows the list of recently executed commands.

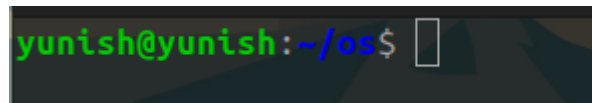
```
yunish@yunish:~/os$ history
176  pip3 install jupyter notebook
177  clear
178  sudo apt install pipx
179  pipx install jupyter notebook
180  pipx uninstall jupyter notebook
181  pipx list
182  code .
183  exit
```

14. clear: Clears the terminal screen.

- Before

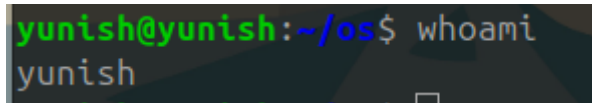
```
yunish@yunish:~/os$ cat yunish.txt
My name is Yunish
yunish@yunish:~/os$ clear
```

- After



```
yunish@yunish:~/os$
```

15. whoami: Displays the current logged-in username.



```
yunish@yunish:~/os$ whoami  
yunish
```

Conclusion

This lab familiarized us with fundamental Linux commands for file management, navigation, and system interaction, forming a foundation for advanced administration and scripting tasks.