**Topic Name:**

The main aim of this lab session is to provide hands-on experience on

* Getting Help
* Basic Commands
* Navigation
* File System
* simple shell script

1. Getting Help

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Task | Command Name | Syntax | Example | Screenshots |
| To get manual page for the known command |  |  |  |  |
| To get manual page for the unknown command |  |  |  |  |
| To know the source file binary |  |  |  |  |
| To know the path of the command |  |  |  |  |
| To know the command is external or internal |  |  |  |  |
| To get help for the internal command |  |  |  |  |
| To list out bash commands |  |  |  |  |
| To know the usage of the command |  |  |  |  |

1. **Basic Commands**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Task | Command Name | Syntax | Example | Screenshots |
| To know today’s date |  |  |  |  |
| To print calendar |  |  |  |  |
| To print kernel version |  |  |  |  |
| To print default shell |  |  |  |  |
| To print currently logged in user |  |  |  |  |
| To create shortcut for command |  |  |  |  |
| To delete shortcut |  |  |  |  |
| To change the timestamp of the file |  |  |  |  |
| To clear the screen |  |  |  |  |
| To create empty files |  |  |  |  |
| To know disk usage |  |  |  |  |
| To know free space in the system |  |  |  |  |
| To know about the Linux release |  |  |  |  |
| To show login history |  |  |  |  |
| To check the current user privileges |  |  |  |  |
| To find about the Linux release |  |  |  |  |
| To check system uptime |  |  |  |  |

1. **Navigation**

|  |  |  |  |
| --- | --- | --- | --- |
| Task | Command | Syntax | Screenshots |
| To navigate home directory |  |  |  |
| To navigate to the parent directory |  |  |  |
| To navigate to the child directory |  |  |  |
| Alternate command to cd |  |  |  |
| To go back to the previous directory |  |  |  |
| To go to the root directory |  |  |  |

1. **File System**

|  |  |  |
| --- | --- | --- |
| **Task** | **Syntax** | **Command** |
| **How to identify the file system** |  |  |

1. Create Folder “CYS”
2. Navigate to CYS
3. Create folder LS1 and LS2 under CYS
4. Go back to CYS
5. Working with Files
6. Add commands which you learnt during lab session in the file commands.txt
7. Change the timestamp of the file to day before yesterday
8. Copy the contents from the file commands.txt to commands\_demo.txt
9. Rename the file commands\_demo.txt to duplicate
10. Rename all .html to .hldd
11. Delete the file duplicate
12. Copy the contents commands.txt to unit4 and unit5 (using relative path)
13. Delete the contents from unit5 (using absolute path)
14. Navigate to root
15. List all the files under root
16. Explore all the folders (Do not delete any folder)
17. Navigate to /etc/passwd
18. Open the file passwd
19. Explore the file passwd
20. Navigate to /etc/group and explore
21. **Difference between** 
    * + 1. GUI vs. CLI
        2. man vs info
        3. which vs. whereis
        4. Terminal vs shell
22. Write a simple shell script to print your name and your hobbies!

**Interesting commands to Explore**

Banner

History

**Note:** Include your screenshots

Evaluation :

Marks : 10 (Deadline : 4 – Originality :3 – Completeness :3 )

Bonus marks may be awarded for identifying commands with potential cybersecurity relevance.

Deadline: 08.08.2025

**“All our dreams can come true if we have the courage to pursue them.”**

**Walt Disney**