



Assignment - 03

ENH 1301 - Application Laboratory

Instructions

- **Do the following questions using the terminal .**
- **Take the necessary screenshots for proof And Create a PDF file that includes screenshots and answers.**
- **Rename the file using your temporary index number (Eg. 230011.pdf) and upload it in the given link.**

Activity 01

1. Navigate to the root directory and list its contents in:
 - a. Regular format
 - b. Long listing format
 - c. Human-readable format
2. Without changing directories, list the contents of:
 - a. /etc
 - b. /bin and /sbin (in a single command)
 - c. Your home directory using ~
3. List all files (including hidden files) in your home directory.
4. Create a directory named practice in your home directory, and inside it create dir1/dir2/dir3 using a single command.
5. Navigate to /etc, then from here, create a folder called newdir inside your home directory.
6. Immediately try deleting practice, and explain what happens and why. Then issue the correct command to remove it recursively.
7. Use pushd to move to /usr, then pushd again to move to /var/log. Use popd twice to return to your original directory. Use man bash to explain what pushd and popd actually do.

8. Use file to check the type of:
 - a. /bin/cat
 - b. /etc/passwd
 - c. /usr/bin/passwd

Activity 02

1. Use file to check the file type of the following files:
 - a. /bin/ls
 - b. /etc/hosts
 - c. /usr/bin/less
2. Create a directory ~/demo_lab and switch into it.
3. Inside demo_lab, create two empty files named alpha.txt and beta.txt using the most efficient method.
4. Use touch to set the timestamp of beta.txt to exactly 2 days ago.
5. Copy beta.txt to a new file named backup_beta.txt in the same directory.
6. Rename alpha.txt to alpha_data.txt.
7. List all files in ~/demo_lab showing detailed information (permissions, owner, timestamp, size, etc.).
8. Use cat to create a new file named logfile.txt with the following content:
 - a. Pgsql
 - b. Copy
 - c. Edit
 - d. Login
 - e. Logout
 - f. Restart
 - g. Shutdown
 - h. Sleep
9. Use a command to reverse the lines in logfile.txt and display the result on the screen.
10. Use echo to display the exact output below in the terminal:

Bash
Copy
Edit
Linux\\Training

```
echo "This is quoted text"
```

11. Create a custom alias named hello that prints Hello from yourname! (replace "yourname" with your real name). Test it.
12. List all defined aliases and locate the one for rm. If it exists, remove it temporarily using the terminal.
13. Use the set -x command to enable shell tracing, and run any two echo commands. Then disable tracing using set +x.
14. Write a one-line command using && and || that does the following:
 - a. Try to create a directory called labtest
 - b. If successful, echo Created successfully
 - c. If failed, echo Failed to create
15. Use echo to print the following exact text with proper spacing and escaping, all in one command:
 - a. Copy
 - b. Edit
 - c. 4+4 =8