NORTHERN UNIVERSITY

Knowledge for Innovation and Change

COURSE TITLE: OPERATING SYSTEM LAB WORK

COURSE CODE: CSE 3373

REPORT ON: IMPLEMENTATION OF LINUX COMMANDS

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Lab Report: Implementing Linux Commands

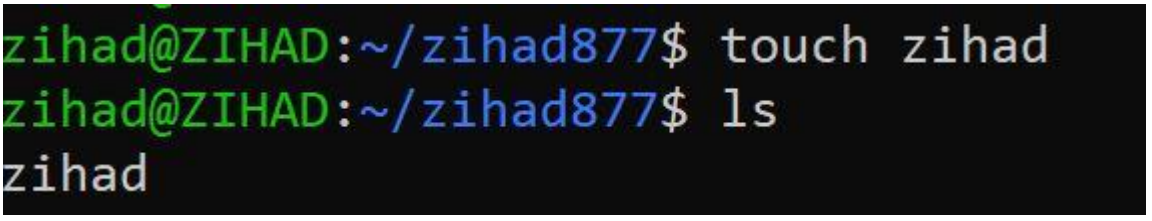
Introduction

Linux is a widely used operating system that provides various commands to interact with the system. In this lab, we will explore basic Linux commands used for managing files and directories. These commands help users create, modify, move, and delete files efficiently.

Device Information Commands

1. touch

- **Function:** Creates an empty file.
- **Description:** The `touch` command is used to create a new, empty file or update the timestamp of an existing file.

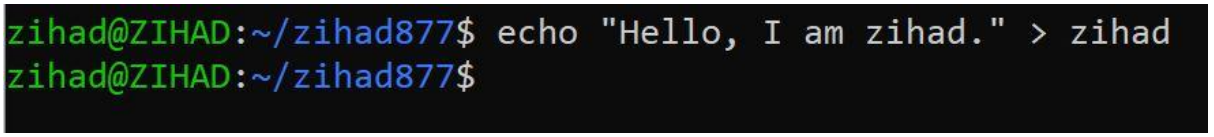


2. pwd

- **Function:** Shows the current working directory.
- **Description:** The `pwd` command prints the full path of the current directory where the user is working.

3. echo

- **Function:** Displays a message or writes to a file.
- **Description:** The `echo` command prints text on the terminal or writes data to a file.



```
zihad@ZIHAD:~/zihad877$ echo "I am from Dhaka" >> zihad
zihad@ZIHAD:~/zihad877$
```

4. cat

- **Function:** Displays file content.
- **Description:** The `cat` command reads and displays the contents of a file in the terminal.

```
zihad@ZIHAD:~/zihad877$ cat zihad
Hello, I am zihad.
I am from Dhaka
zihad@ZIHAD:~/zihad877$
```

5. cat >>

- **Function:** Appends data to a file.
- **Description:** The `cat >>` command allows users to add content to an existing file without overwriting it.

```
zihad@ZIHAD:~/zihad877$ cat >> zihad
Norther University Bangladesh
Operating system labzihad@ZIHAD:~/zihad877$
```

6. wc

- **Function:** Counts words, lines, and characters in a file.
- **Description:** The `wc` command provides statistics such as the number of lines, words, and characters in a file.

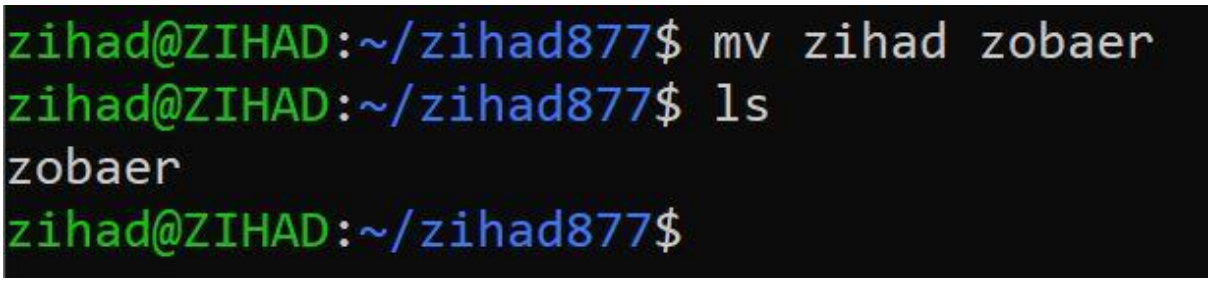
```
zihad@ZIHAD:~/zihad877$ wc zihad
 3 14 85 zihad
zihad@ZIHAD:~/zihad877$
```

7. du

- **Function:** Displays disk usage of files and directories.
- **Description:** The `du` command shows the amount of disk space used by files and directories.

8. mv

- **Function:** Moves or renames a file or directory.
- **Description:** The `mv` command allows users to move files to a different location or rename them.

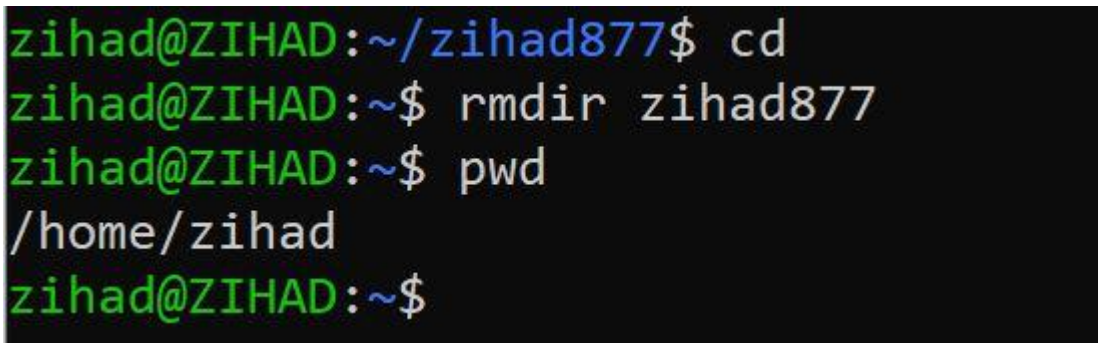


9. rm

- **Function:** Deletes files.
- **Description:** The `rm` command removes files from the system permanently.

10. rmdir

- **Function:** Removes empty directories.
- **Description:** The `rmdir` command deletes a directory if it is empty.



Discussion

Linux commands are useful for managing files and directories. The commands covered in this lab help users create, modify, and delete files efficiently. By practicing these commands, users can improve their ability to navigate and organize files on a Linux system.

Conclusion

This lab introduced essential Linux commands for file management. Understanding and using these commands will help users work efficiently with the Linux system. Mastering these basic operations is crucial for anyone using Linux regularly.