NORTHERN UNIVERSITY

Knowledge for Innovation and Change

COURSE TITLE: OPERATING SYSTEM LAB WORK
COURSE CODE: CSE 3373

REPORT ON: IMPLEMENTATION OF LINUX COMMANDS

SUBMITTED TO,
NIZIA NAHYAN
LECTURER, NUB(CSE)

SUBMITTED BY,
ZOBAER AHMED ZIHAD
ID: 41230100877
SECTION: 7A

DATE OF SUBMISSION: 19 FEBRUARY 2025

Lab Report: Implementing Linux Commands

Introduction

Linux is a popular operating system used for various computing tasks. It provides powerful command-line tools to manage system information and work with files and directories efficiently. In this lab report, we will explore some basic Linux commands related to system information and folder management.

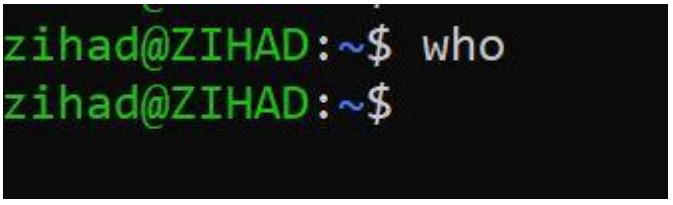
Device Information Commands

1. hostname

- **Function:** Displays the name of the computer.
- **Description:** The `hostname` command is used to check the system's network name. It is useful for identifying the device in a network.

2. who

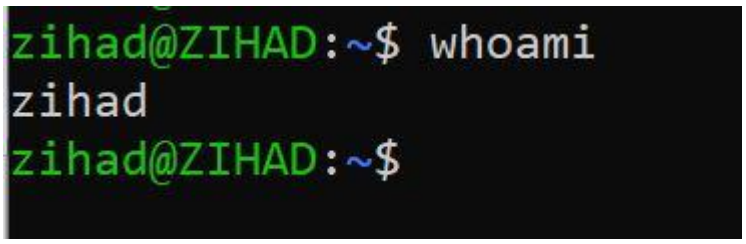
- **Function:** Shows users currently logged into the system.
- **Description:** The `who` command provides a list of users currently using the system, along with their login details.



3. whoami

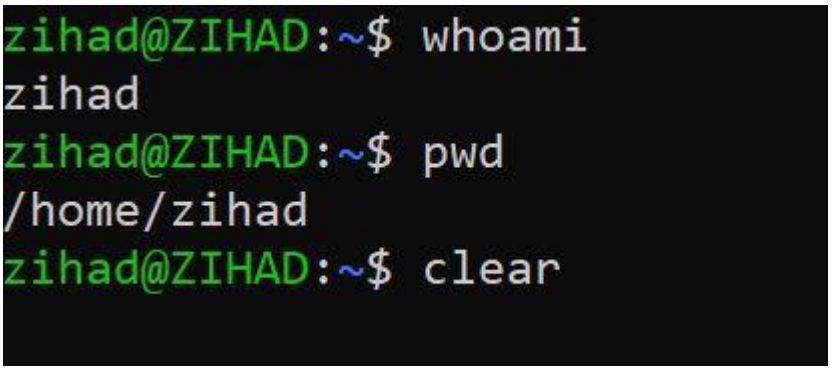
- **Function:** Displays the current logged-in user.

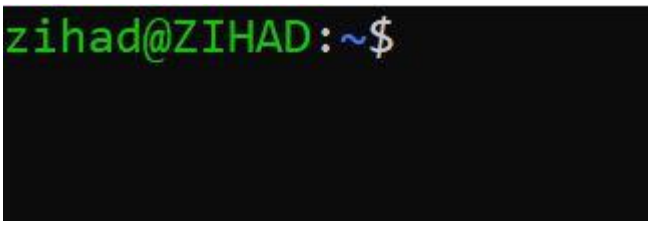
- **Description:** The `whoami` command returns the username of the person executing the command.



4. clear

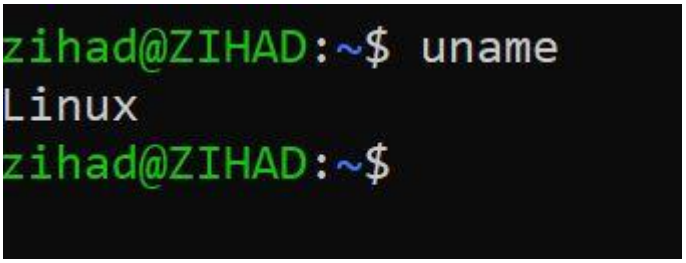
- **Function:** Clears the terminal screen.
- **Description:** The `clear` command removes all previous commands and outputs from the terminal screen, making it easier to work.





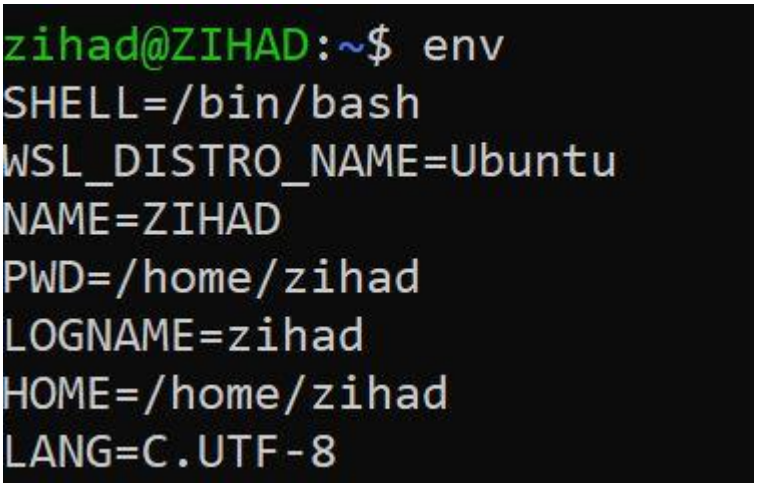
5. uname

- **Function:** Provides system information.
- **Description:** The `uname` command prints system details such as the operating system name and kernel version.



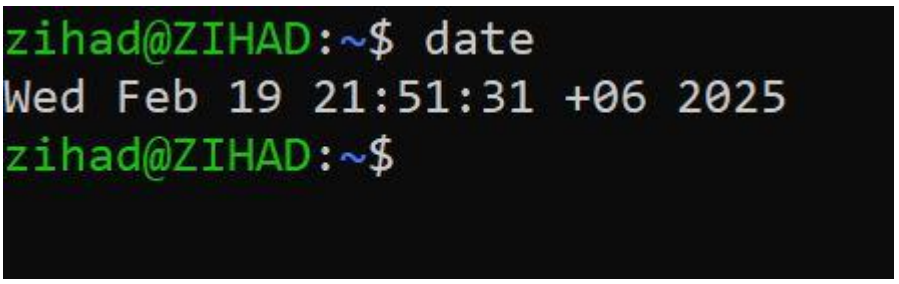
6. env

- **Function:** Displays environment variables.
- **Description:** The `env` command lists all the environment variables set for the current user session.



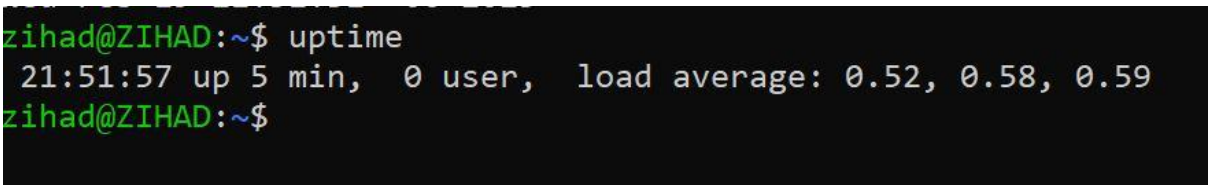
7. date

- **Function:** Shows the current date and time.
- **Description:** The `date` command prints the system's date and time settings.



8. uptime

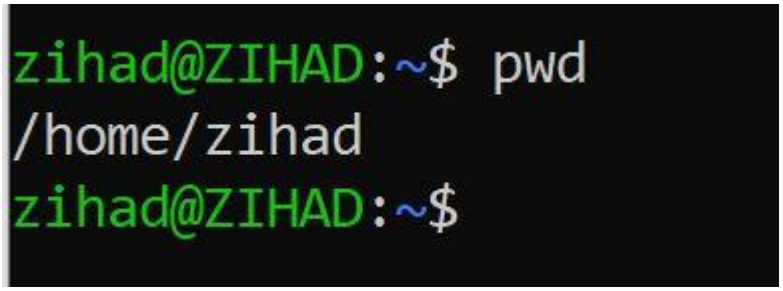
- **Function:** Displays how long the system has been running.
- **Description:** The `uptime` command provides information about system runtime and current users.



Folder Management Commands

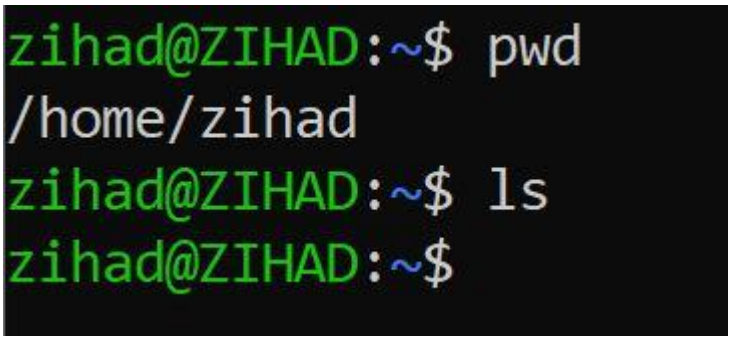
1. pwd

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



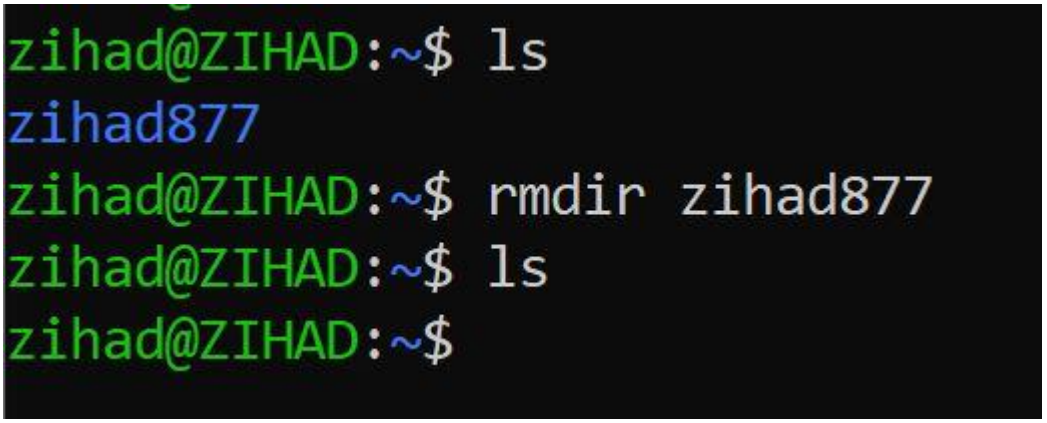
2. ls

- **Function:** Lists files and folders in a directory.
- **Description:** The `ls` command shows the contents of a directory, including files and subdirectories.



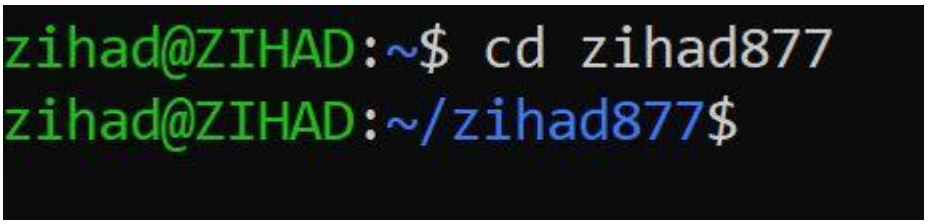
3. mkdir

- **Function:** Creates a new directory.
- **Description:** The `mkdir` command allows users to create new directories (folders) in the file system.



4. cd folder_name

- **Function:** Changes the current directory to a specified folder.
- **Description:** The `cd folder_name` command moves the user into a specified directory.

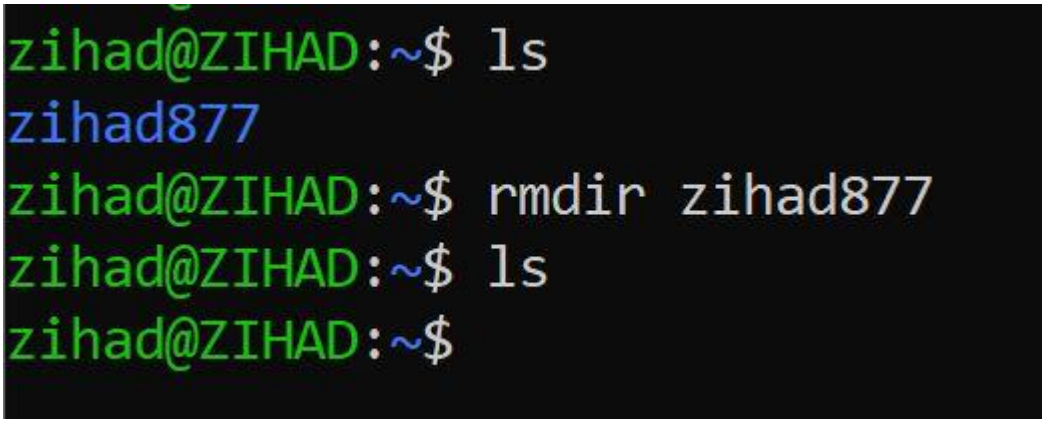


5. cd..

- **Function:** Moves to the parent directory.
- **Description:** The `cd..` command allows users to go back to the previous directory in the folder hierarchy.

6. rmdir folder_name

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



Discussion

Linux commands are essential for system management and file handling. The commands covered in this lab report help users obtain system information and navigate directories effectively. Understanding these basic commands is crucial for efficiently using Linux. Practicing these commands will make it easier to manage files, users, and system settings.

Conclusion

This lab introduced basic Linux commands for system information and file management. By using these commands, users can interact with the Linux system more efficiently. Learning these fundamental commands is the first step toward mastering Linux administration.