Notes 3

What is a graphical user interface (GUI)?

A graphical user interface (GUI) is a visual way to interact with your computer using elements like windows, icons, menus, and buttons instead of typing text commands.

What is a desktop environment?

A desktop environment is a collection of software that provides a complete graphical interface for the user. It includes a window manager, file manager, taskbar, and other graphical tools. Common desktop environments in Debian include GNOME, KDE Plasma, XFCE, and LXQt.

What is the command line interface (CLI)?

A command line interface (CLI) is a text-based interface that allows users to type commands to interact with the operating system. Instead of clicking icons, you enter commands like ls, cd, or apt update to perform tasks.

How do I access the command line interface (CLI)?

You can access the CLI in Debian in several ways:

From the GUI open a terminal emulator (like GNOME Terminal or Konsole).

What is a virtual console?

A virtual console is a full-screen text interface that lets you log in and run commands without the graphical desktop.

What is a terminal emulator?

A terminal emulator is a program that runs inside the GUI and lets you use the command line.

What is bash?

Bash (Bourne Again SHell) is the default command interpreter (shell) in most Linux systems, including Debian. It reads your typed commands, executes them, and shows the results.

What is the shell prompt?

The shell prompt is the text that appears in the terminal showing the system is ready for input.

clear

- **Definition**:Clears all text from the terminal screen.
- **Usage**:Keeps the terminal organized by removing previous command outputs from view.
- **Example**: clear , clears the screen in terminal.

echo

- **Definition**:Displays a line of text or the value of a variable.
- **Usage**:Often used in scripts to print messages or check variable values.
- **Example**:echo "Hello, Debian!"

date

- **Definition**:Shows or sets the system's date and time.
- **Usage**:: Useful for checking the current date/time or formatting timestamps.
- **Example**: date

free

- **Definition**:Displays information about system memory (RAM and swap).
- **Usage**:Used to monitor available and used memory.
- **Example**:free -h

uname

- **Definition**:Prints system information such as kernel name, version, and architecture.
- **Usage**:Commonly used to check Linux kernel or OS details.
- **Example**:uname -a

history

- **Definition**:Displays a list of commands previously entered in the terminal.
- **Usage**:Helps review or repeat past commands.
- **Example**:history to show history

man

- **Definition**:Opens the manual (documentation) for a command.
- **Usage**:Learn how a command works, its syntax, and options.
- **Example**:man ls

tldr

- **Definition**:Provides simplified, community-maintained explanations of commands.
- **Usage**:Great for quick examples instead of long manuals.
- **Example**:tldr tar

cheat

- **Definition**:Displays cheat sheets with practical examples for commands.
- **Usage**:Useful for quick reminders of command syntax and usage.
- **Example**:cheat grep

hostname

- **Definition**:Shows or sets the system's network name (hostname).
- **Usage**:Helps identify your machine on a network.
- **Example**:hostname hostnamectl set-hostname debian13

df

- **Definition**:Displays available disk space on mounted file systems.
- **Usage**:Checks how much disk space is free or used.
- **Example**:df -h

du

- **Definition**:Shows disk usage of files and directories.
- **Usage**:Helps identify which folders use the most space.
- **Example**:du -sh /home/miguel

figlet

- **Definition**:Generates large ASCII art text banners in the terminal.
- **Usage**:Adds fun or emphasis to terminal messages or scripts.
- **Example**:figlet Debian Rocks!