

Answers to the following questions:

What is a graphical user interface (GUI)?

A GUI is a way to interact with a computer using windows, icons, menus, and a mouse instead of typing commands. It is user-friendly and visual.

What is a desktop environment?

A desktop environment is the complete graphical workspace that includes the window manager, panels, menus, icons, and settings.

What is the command line interface (CLI)?

The CLI is a text-based interface where users type commands to interact with the system directly.

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

You can access the CLI by:

Opening terminal from the desktop menu

Pressing Ctrl + Alt + T

Switching to a virtual console

What is a virtual console?

A virtual console is a text-only login screen that runs without the graphical interface.

What is a terminal emulator?

A terminal emulator is a graphical program that lets you use the command line inside the desktop environment.

What is bash?

Bash (Bourne Again Shell) is the most common Linux shell. It interprets commands typed by the user and executes them.

What is the shell prompt?

The shell prompt is the text that appears when the shell is ready to accept commands.

Definition, usage, and examples of the following commands:

1. **clear** Definition: Clears the terminal screen Usage: Clean up the display

```
clear
```

2. **echo** Definition: Prints text or variables to the terminal Usage: Display messages or output values

```
echo "Hello World"
```

3. **date** Definition: Displays or sets the system date and time Usage: Show current date/time

```
date  
date --rfc-3339=ns
```

4. **free** Definition: Displays memory usage Usage: Check free and used RAM

```
free -h
```

5. **uname** Definition: Shows system and kernel information Usage: Identify OS and kernel details

```
uname -a
```

6. **history** Definition: Shows previously run commands Usage: Review command history

```
history
```

7. **man** Definition: Displays the manual page for a command Usage: Learn command options

```
man ls
```

8. **tldr** Definition: Simplified help pages with examples Usage: Quick command reference

```
tldr tar
```

9. **cheat** Definition: Community cheat sheets for commands Usage: Learn commands quickly

```
cheat docker
```

10. **hostname** Definition: Displays or sets the system hostname Usage: Identify machine name

```
hostname
```

11. **df** Definition: Shows disk space usage of filesystems Usage: Check available storage

```
df -h
```

12. **du** Definition: Displays disk usage of files and directories Usage: Find large folders

```
du -sh *
```

13. **figlet** Definition: Creates large ASCII text banners Usage: Decorative text output

```
figlet Linux
```