What is a Shell?

- A shell is a user interface to access the operating system's services.

- Interprets user commands and scripts.

- Common in both Windows and Linux environments.

Shells in Microsoft (Windows)

- CMD (Command Prompt): Legacy shell with basic capabilities.

- PowerShell: Modern shell using .NET, passes objects, powerful for automation.

- Anaconda Prompt: Specialized shell bundled with Anaconda for Python/data science tasks.

Shells in Linux

- Bash (Bourne Again Shell): Default in most distros, scripting-friendly.
- Zsh: Extended shell with customization and plugins (e.g., Oh My Zsh).

Shell Comparison Table

Feature	CMD	PowerShell	Bash	Zsh	Anaconda Prompt
Platform	Windows	Cross-platform	Linux/macOS/WSL	Linux/macOS	Windows
Default For	Older Windows	Windows 10+	Most Linux distros	macOS/Linux users	Anaconda Distribution
Syntax	Simple	Object-oriented	Unix-style	Enhanced Bash	CMD-based
Script Extension	.bat/.cmd	.ps1	.sh	.zsh	None
Scripting Power	Basic	Very High	High	Very High	Moderate (for conda/Python tasks)
Object Handling	Strings	Objects	Text	Text	Text
Customization	Low	Moderate	High	Very High	Low