

Notes 1: Bash Shell

Commands cover in lecture:

Echo

Definition: Display a line of text

Usage `echo +option +string`

Examples:

- Display a line of text without the new line `echo -n "hello world"`
- Display a line of text that includes a horizontal tab `echo -e "\thello world"`
- Display 2 lines of text in a single echo command `echo -e "Line 1\nLine2"`
- Display 2 lines of text in a single echo command with the second line starting with a tab `echo -e "Line 1\n\tLine 2"`
- Display 2 lines of text in a single echo command that starts with a tab `echo -e "\tLine 1\tLine 2"`

date

Definition Print or set the system date and time

Usage `date +option`

Examples:

- Display current date `date`
- Display current date in rfc 5322 format `date -R`

free

Definition Display amount of free and used memory in the system

Usage `free +option`

Examples:

- Display memory utilization `free`
- Display memory utilization in human readable format `free -h`

uname

Definition Print system information

Usage `uname +option`

Examples:

- Print all information `uname -a`

- Print kernel information `uname -s`
- Print node name `uname -n`

history

Definition Shows command line history

Usage `history +option`

Examples:

- Display session history `history`
- Clear session history `history -c`

man

Definition An interface to the system reference manuals

Usage `man +option +command`

Examples:

- Open the man page of echo command `man echo`
- Open a specific man page `man 5 passwd`
- Show all available man pages `man -f passwd`

apt

Definition A set of tools for managing Debian packages

Usage `sudo(if required) + apt + apt-action + package-name`

Examples:

- Update and upgrade `sudo apt update && sudo apt upgrade -y`
- Install a program `sudo apt install firefox`
- Remove a program `sudo apt remove firefox`
- Search for a program `apt search "Web Browser"`
- List all installed programs `apt list --installed`

Snap

Definition Snaps are app packages for desktop, cloud, and IoT that are easy to install, cross-platform, and dependency-free

Usage `sudo(if needed) + snap + action + package-name`

Examples:

- Find a snap `snap search "video player"`
- Install a snap `sudo snap install vlc`
- Remove a snap `sudo snap remove vlc`

- Update snaps `sudo snap refresh`

Flatpak

Definition Flatpak is a next-generation technology for packaging, distributing, and managing software in Linux

Usage `sudo(if needed) + flatpak + action + package-id`

Examples:

- Search for a package `flatpak search "video player"`
- Install a package `flatpak install org.videolan.VLC`
- Remove Flatpak `flatpak remove org.videolan.VLC`
- Update packages `flatpak update`