## Notes Week 3

Commands covered 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\nLine 2"
  - 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\nLine 2"

### date

- · Definition: Print or set the system date and time
- Usage: data + 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 app 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 package
  - flatpak search "video player"
- Install package
  - flatpak install org.videolan.VLC
- Remove flatpak
  - flatpak remove org.videolan.VLC