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

`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

`usage` + `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 manual

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 package
    - `flatpak search "video player]+
- Install package
- Remove flatpak
- Update packages