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`

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uname

Definition

Print system information

Usage

`uname` + `option`

Examples

- Print all information

    - `uname -a`

- Print kernel information

- `uname -s`

- Print node name

    - `uname -n`

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history

Definition

Shows command line history

Usage

`history + option`

Examples

- Display session history
    - `history`

- Clear session history
    - `history -c`

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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`

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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 upgrde
- installa 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
    - flatpak install org.videolan.VLC
- Remove flatpak
    - flatpak remove org.videolan.VLC
- Update packages
    - flatpak update