

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

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