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