# Commands and Unix Shell

Joel Chacón C.

CIMAT

21st July 2021

## How are sorted the files in Linux?

The structure of the directories in Linux are as follows:

- bin, the binary files of the system (shells) like ls, grep, tar, kill, echo, cp, mv, rm, cat, ...
- etc, configuration files.
- *lib*, contains all helpful library files used by the system.
- dev, special device files for all the devices.
- opt, unbundled packeges.
- home, personal configuration files.

## Linux commands

Always read the manual, or at least check the *help* options.

A list of the most basic commands can be the following:

- pwd, find out the path of the current working directory (folder) in which you are.
- cd, to navigate through the Linux files and directories:
  - cd .., to move one directory up.
  - cd, to go straight to the home folder.
  - cd-. to move to your previous directory.
- Is, to view the contents of a directory.
- cp, copy files from the current directory to a different directory.
- mv, move files from the current directory to a different directory.
- mkdir, makes a new directory.



## Linux commands

- m, deletes files.
- rm -fr, deletes directories and their contents.
- find, locates files and rectories (find . -name file.txt).
- **grep**, search through all the text in a given file.
- head, shows the first lines of any text file.
- tail, shows the last lines of any text file.
- diff, compares the contents of two files line by line.

## Linux commands

- **a** cat, concatenate files and redirect output in terminal or files.
- cut, is a command for cutting out the sections from each line of files and writing the result to standard output
- >, redirects the standard output from one file.
- $\blacksquare$  &, sends a task to the background.
- ctrl + z, pauses a task.
- fg pid, continues a task. bg pid, sends a task to the background.

# Linux bash

- Bash is a Unix shell and command language written by Brian Fox for the GNU Project as a free software.
- Bash is a command processor that typically runs in a text window where the user types commands that cause actions.
- Bash can also read and execute commands from a file better known as shell script.

# Linux shell

■ Check an example of a bash-script.

More information in *The Linux Command Line* by William E. Shotts, Jr.

https://wiki.lib.sun.ac.za/images/c/ca/TLCL-13.07.pdf