

#### Table of contents

- What is Linux
- Navigation and File management (cd, ls, pwd, ..)
  - Give some time to practice
- Redirection & Piping
- File editors
- Sourcing & Environment
  - Practice reading and writing to/from a file
  - Cat the output and redirect to another file
  - Sort the output and write in another file
- File Permissions (Assignment)
- Linux Filesystem Hierarchy (Assignment)

#### What is Linux

- Linux is an operating system that was developed by Linus Torvalds in 1991. The name "Linux" originates from the Linux kernel. It is an open-source software that is completely free to use.
- Linux architecture
  - Hardware
  - Kernel (Controls the hardware)
  - System Utility (OS functions)
  - Shell (CLI)
- Everything is a file

## Navigation and File management

Ls

Cd

Pwd

Touch

Mkdir

Rmdir

Rm

Cp

Mv

Cat

Less

More

Head

Tail

Clear

Grep

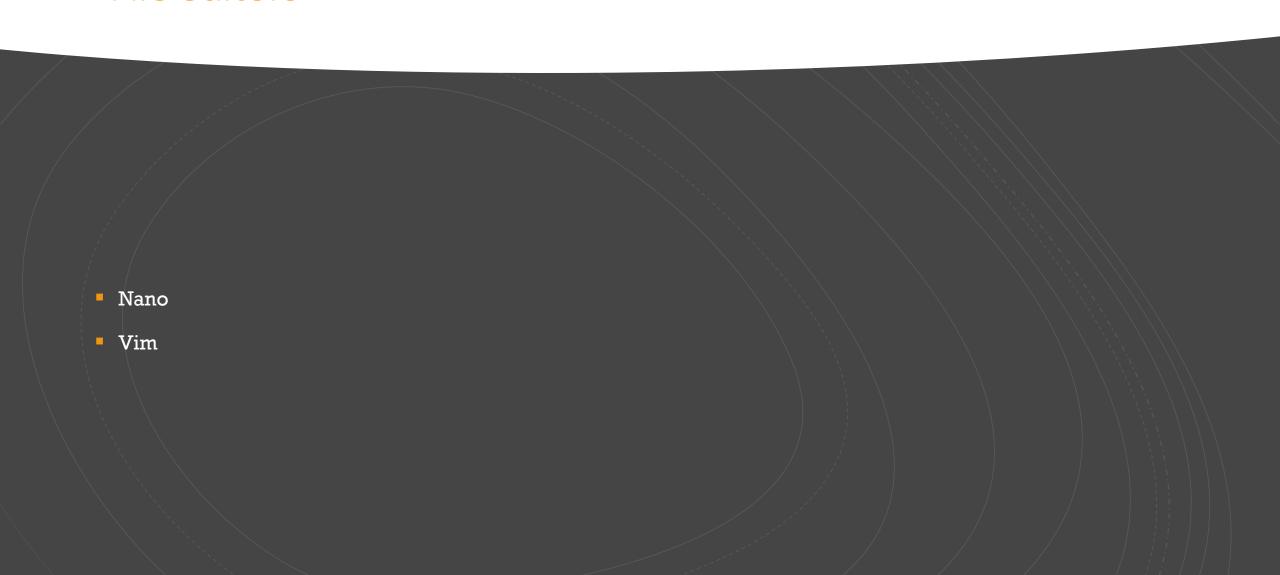
Sort

Man

# Redirection and Piping

- File descriptors: STDIN (0), STDOUT(1), STDERR(2)
- > and >>

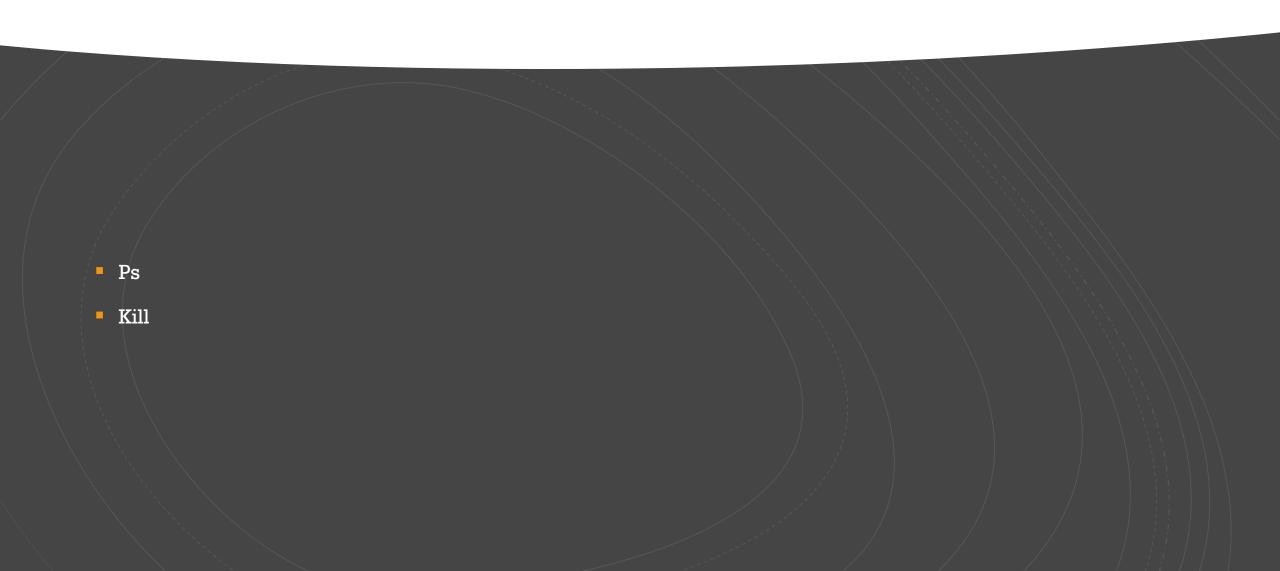
## File editors



## Sourcing & Environments

- User profile environment vs. System Environment
- Sourcing: source or ". filename"

#### Processes



## Git?

Create a repo and push a C++ hello world file