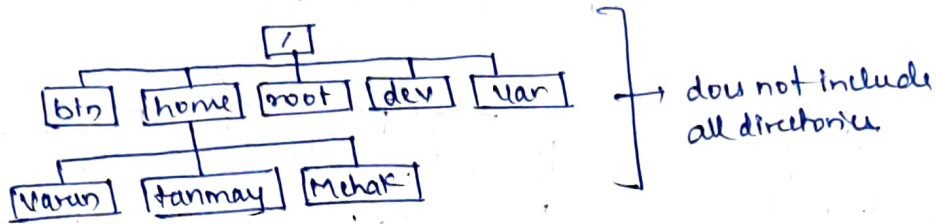


Section - 5 - Navigation

Root directory

- The starting point for the file system is the root directory we call it root, but its actual directory name is "/"
- confusingly, there is a sub-directory named "root", these are not the same



- The Home contains a home folder for each user on the system. example my home folder is located at /home/varun.

/ - root
~ - home

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Navigation

Command 11 - pwd - print working directory

- The print working directory command is super-simple, very, useful, It is a "where am I" command
- It will print the path of your current working directory starting from root/.
- Ex: If I were on my desktop and I ran pwd, I would see /home/colt/desktop or /home/varun/desktop

Command 12 - ls - lists the contents in directory

> ls [OPTION] ... [FILE].

- when used in no option or argument, it prints a list of the files and folders located in the current directory
- We can also list the contents of a specific directory using ls path
 - Example: ls /bin will print contents of bin directory
 - Argument

options

two most commonly used are -l and -a

- > ls -l → gives us a long description format for current directory
- > ls -a → will also give out any hidden files that begin with "." these are normally not found.
 - "." such files are called hidden files or hidden folders.
- can be combined ls -al.

Command 13 - cd - command is used to change the current working directory, "moving into another directory."

> cd /home/varun → takes me to my home directory

backing up → cd ..

Note "." is a reference to current directory

meaning → when we do ls -a in an empty directory we get ".", ".."

- → current directory
- → reference to parent directory.
- cd ~ → home
- cd / → root

Paths

- relative paths
- Absolute paths

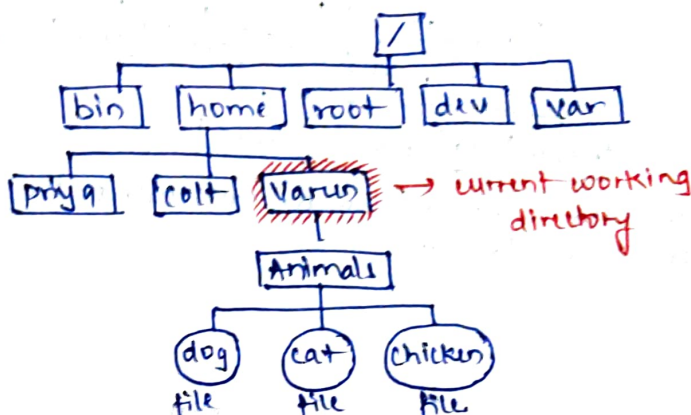
Relative paths

when providing paths to commands like `cd` or `ls`, we have the option of using relative or absolute paths.

Relative paths only work from current directory

they specify a directory/file relative to current directory

Ex our current directory is `/home/varun` and we want to `cd` into `animals`, we can simply run `cd animals`



However → `cd animals` does not work if we are located in another directory like `/bin`. The relative path from `bin` is `/home/varun/animals`.

It works from where I am.

Absolute paths

Absolute paths are paths that start from the root directory (they start with a `/`). The absolute path to the `animals` directory is `/home/colt/animals`, we can use absolute paths to specify a location no matter our current location.

Example, from the `/bin` directory I could use `cd /home/varun/animals` to change into the `animals` directory.

Overview of folders (refer to `RootDirectory.png`).

- `/` → root
- `bin` → contains bunch of executable programs
- `etc` → contains bunch of configuration files and initialization scripts
- `var` → variable
 - contains info on logging / log files.
- `root` → permission denied to enter as it is the home to the super user Admin