



- The Ubuntu File System, is like most Linux File System
 - 1. Root Directory (/):
 - a. bin:
 - In software, "bin" often refers to a binary file. These are files that store data in a non-human-readable format, typically using a series of 0s and 1s.
 - They are generally executable files, meaning they can be directly launched by the operating system to perform specific tasks. Examples include programs, applications, and scripts.
 - These files are usually stored in directories like /bin, /sbin, or /usr/bin on Linux and Unix-based systems.

b. boot:

- The bootloader is a crucial piece of software responsible for initiating the system startup process.
- It's loaded into memory before the operating system itself and performs several key tasks: Reads the boot configuration files, Identifies and loads the appropriate kernel (the core of the operating system), Initializes essential hardware components, Hands control over to the loaded kernel, allowing the operating system to start.
- In Ubuntu, the most common bootloader is GRUB (GRand Unified Bootloader).

c. dev:

Provides access to device drivers.

This directory interacting with various hardware devices. It serves as a central location for accessing these devices through **special files**

d. etc:

- is crucial for system administration as it holds various configuration files that define the settings and behaviour of the operating system.
- Stores configuration files for a wide range of aspects, including:
 - User accounts and authentication (e.g., /etc/passwd, /etc/shadow)
 - Networking (e.g., /etc/hosts, /etc/resolv.conf)
 - Services and daemons(e.g., /etc/apache2/apache2.conf, for the Apacheweb Server)
 - System settings (e.g., /etc/timezone, /etc/fstab)
 - Package management (e.g., /etc/apt/sources.list, for APT package manager)

e. home:

- Contains user directories (e.g., /home/username).

f. lib:

- Holds shared libraries used by applications.

g. media:

- Mount point for removable media (e.g., USB drives).

h. mnt:

- Temporary mount point for external filesystems.

i. opt:

- Holds optional third-party software packages.

i. sbin:

- Contains system administration tools (e.g., fdisk, mount).

k. srv:

- Intended for storing data offered by services (e.g., web servers).

l. tmp:

- Stores temporary files.

m. usr:

- Houses the majority of user applications, libraries, and documentation.

n. var:

- "/var" stores data that changes frequently during system operation.
- It contains logs, spool directories, temporary files, and application data.
- Understanding the contents of "/var" is valuable for system administration.
- It's essential to manage the data in "/var" effectively, particularly log files, to Maintain system performance and stability.

o. root:

- Home Directory for the root user.

p. **proc:**

- Provides information about processes running on the system.
- use for System Monitoring, Process information retrieval, Kernel debugging