* The /dev directory

→ The /dev directory contains device nodes, a type of psudo-file used by most hardware and software. Eyept for network devices.

- Empty on the disk partition when it is not mounted.

- Contains entries which are created by udev system. which creates and manage devices node on linyx creating them dynamically when devices are found.

→ The /dev directories contains items such as

1. /dev/sda1 (first partition on the first hard disk),

2. /dev/dP1 (second Primary)

3. /dev/random (a source of random numbers).

* The /var Directory

—> The /var directory contains files that are
   expected to change in size content as the
   system is running (var stands for variable).

—> Such as the entries in the following directories.

   - system log files : /var/log

   - Package and database files : /var/lib

   - Print queues: /var/spool

   - Temporary files /var/tmp.

—> The /var directory may be put on it's own
   file system so that growth of the files
   can be accommodated and any exploding
   file size do not fatally affect the
   system.

—> Network services directories such as
   /var/www (the HTTP web service) are
   also found under /var.

* The /etc Directory

→ The /etc directory is the home for system configuration files.

→ It contains no binary programs, although there are some executable scripts.

→ Files like passwd, shadow and group for managing user accounts are found in the /etc directory.

→ While some distributions have historically had their own extensive infrastructure under /etc

→ Note that /etc is for system-wide configuration file and only the superuser can modify files there.

* The /boot directory

→ The /boot directories contains the few essential files needed to boot the system.

→ For every alternative kernel installed on the system there are four files.

    1. vmlinuz
    → The compressed linux kernel, required for booting.

    2. initramfs
    → The initial ram file system, required for booting sometime called initrd, not initramfs.

    3. config
    → The kernel configuration files only used for debugging and bookkeeping.

    4. system.map
    → kernel symbol table only used for debugging.

→ Each of these file has kernel version appendent to it's name.

→ The Grand unified Bootlouder (GRUB) files such as /boot/grub/grub.conf or /boot/grub2/grub2.cfg are also found under the /boot directories.