**File System Hierarchy**

1. **/root** - Home directory of the root user.
2. **/boot** - Contains booting files.
3. **/home** - Saves non-privileged user data.
4. **/var** - Contains server log files, database files, etc.
5. **/tmp** - Saves temporary data.
6. **/dev** - Contains hardware files (CPU, RAM, hard disk).
7. **/bin** - Contains command binaries that can be run by both privileged and non-privileged users.
8. **/sbin** - Contains command files executable only by privileged users (e.g., groupadd, fdisk -l, init 0, init 6).
9. **/etc** - Contains system configuration files, user files, group files, password files.
10. **/lib** - Contains OS info files.
11. **/opt** - Contains OS package files.
12. **/usr** - Contains third-party package files.
13. **/srv** - Contains all service files.
14. **/proc** - Contains all process files.
15. **/mnt** and **/media** - Used for mounting partitions with folders.

**Mounting** - The process of connecting a partition with a folder.

**File Editor**

**File editors** are used to edit files:

* **CLI (Command Line Interface):** vi/vim, nano
* **GUI (Graphical User Interface):** gedit

**vi/vim Editor**

vi (visual interface) and vim (vi improved) are text editors with three modes:

1. **Command Mode** - View data.
2. **Insert Mode** - Edit data (press i to enter this mode).
3. **Exit Mode** - Save and exit (press Shift+: to enter this mode).

Common commands in vi/vim:

* Press I - Enter Insert Mode.
* Press Esc - Enter Command Mode.
* :wq - Save and exit.
* :x - Save and exit.
* :q - Exit without saving.
* :q! - Force exit without saving.
* :wq! - Force save and exit.
* :se nu - Set line numbers.
* :se nonu - Remove line numbers.

**Insert Mode Options:**

* i - Insert text from current cursor position.
* I - Insert text at beginning of the line.
* a - Insert text after the current character.
* A - Insert text at the end of the line.
* o - Insert an empty line below the cursor.
* O - Insert an empty line above the cursor.
* r - Replace a single character.

**Command Mode Options:**

* H - Go to the beginning of the page.
* M - Go to the middle of the page.
* L - Go to the end of the page.
* Ctrl+f - Forward one page.
* Ctrl+b - Backward one page.
* dd - Delete a single line.
* 4dd - Delete 4 lines.
* yy - Copy one line.
* 6yy - Copy 6 lines.
* P - Paste once.
* 4p - Paste 4 times.
* u - Undo.
* Ctrl+r - Redo.
* gg - Go to the beginning of the file.
* G - Go to the end of the file.
* /root - Search for a specific word.

**Nano Editor**

nano is a simpler text editor. Here are some key commands:

* ^ - Ctrl key
* M - Alt key

**Example command:**

* nano cloud - Opens the file "cloud" in nano editor.

**GUI Editor:**

* gedit - A graphical text editor.