1.PWD:- which folder working

2.Create file :- touch filename

3.cat:- to see the content of the file.

4.cat>>:- append the data in the file.

cat << EOF > myfile

**cat** combined with redirection

5.echo- print statement, create file and write something

6.nano- edit text

7.cp -copy file

8.cp-r

9. move- mv <source file> <destinationfile> rename file.

10. rm -> delete the file

11. rm-r > deleting directry.

12. sudo apt-get update

13.sudo apt install apache2

14.grep- to filter out all the text from file

15. grep -i <query> filename

16.grep -v<query params> filename discard

17. grep -i -v<query params> filename

18. backbroud process running-

19.sudo service processname

20.sudo service processname status

21.ps -e – show all the process running in background

22. sudo service processname start

23. sudo service processname stop

24.man description

25. how to see permission >ls -la

26.to create hidden file> mkdir .abc

27.chmod go-rx remove read and execute action

28.chmod ugo+ rwx filename -> give all permission

Apache2 create command

sudo apt-get update -y: - For updating

sudo apt-get install apache2 -y: - Install apache web server

cd /var/www/html

sudo rm index.html

sudo nano index.html – add you html code , press ctrl+x and Y to save file

sudo service apache2 restart

https://www.tecmint.com/add-new-disk-to-an-existing-linux/

Check firewell list:- sudo ufw app list

sudo ufw enable

Allow full control

sudo ufw allow 'Apache Full'

**Verify that the Apache service is running**  
sudo systemctl status apache2

Vi editor:-

1. Vi myfile -> edit my file
2. O – insertnewline text
3. X- delete
4. U- undo previous operation
5. **vi -r myfile -** Start **vi** and edit **myfile** in recovery mode from a system crash
6. **:wq – save and changes…..quit vi file**
7. Filesystem Layout

|  |  |  |
| --- | --- | --- |
| **/bin** | Yes | Essential executable programs that must be available in single user mode |
| **/boot** | Yes | Files needed to boot the system, such as the kernel, initrd or initramfs images, and boot configuration files and bootloader programs |
| **/dev** | Yes | **Device Nodes**, used to interact with hardware and software devices |
| **/etc** | Yes | System-wide configuration files |
| **/home** | Yes | User home directories, including personal settings, files, etc. |
| **/lib** | Yes | Libraries required by executable binaries in **/bin** and **/sbin** |
| **/lib64** | No | 64-bit libraries required by executable binaries in **/bin** and **/sbin**, for systems which can run both 32-bit and 64-bit programs |
| **/media** | Yes | Mount points for removable media such as CD’s, DVD’s, USB sticks, etc. |
| **/mnt** | Yes | Temporarily mounted filesystems |
| **/opt** | Yes | Optional application software packages |
| **/proc** | Yes | Virtual pseudo-filesystem giving information about the system and processes running on it; can be used to alter system parameters |
| **/run** | Yes | System information data describing the system since it was booted; should be cleared at every reboot |
| **/sys** | No | Virtual pseudo-filesystem giving information about the system and processes running on it; can be used to alter system parameters, is similar to a device tree and is part of the Unified Device Model |
| **/root** | Yes | Home directory for the root user |
| **/sbin** | Yes | Essential system binaries |
| **/srv** | Yes | Site-specific data served up by the system; seldom used |
| **/tmp** | Yes | Temporary files; on many distributions lost across a reboot and may be a ramdisk in memory |
| **/usr** | Yes | Multi-user applications, utilities and data; theoretically read-only |
| **/var** | Yes | Variable data that changes during system operation |

1. **Directories Under /usr**

| **Directory** | **Purpose** |
| --- | --- |
| **/usr/bin** | Non-essential binaries and scripts, not needed for single user mode; generally this means user applications not needed to start system |
| **/usr/include** | Header files used to compile applications |
| **/usr/lib** | Libraries for programs in **/usr/bin** and **/usr/sbin** |
| **/usr/lib64** | 64-bit libraries for 64-bit programs in **/usr/bin** and **/usr/sbin** |
| **/usr/sbin** | Non-essential system binaries, such as system daemons |
| **/usr/share** | Shared data used by applications, generally architecture-independent |
| **/usr/src** | Source code, usually for the Linux kernel |
| **/usr/X11R6** | X Window files; generally obsolete |
| **/usr/local** | Local data and programs specific to the host; subdirectories include **bin**, **sbin**, **lib**, **share**, **include**, etc. |

1. **Directories Under /var**

| **Directory** | **Purpose** |
| --- | --- |
| **/var/lib** | Persistent data modified by programs as they run |
| **/var/lock** | Lock files used to control simultaneous access to resources |
| **/var/log** | Log files |
| **/var/mail** | User mailboxes |
| **/var/run** | Information about the running system since the last boot |
| **/var/spool** | Tasks spooled or waiting to be processed, such as print queues |
| **/var/tmp** | Temporary files to be preserved across system reboot; sometimes linked to **/tmp** |
| **/var/www** | Root for website hierarchies |

4.The command line utility for creating and examining hard disk partitions is **fdisk**; to see all currently attached device

sudo /sbin/fdisk -l – to see disk partition

To Modify the patition:-

sudo fdisk /dev/xda1

Graphical display gparted

Create a simple executable file with the name **ls** in your current directory, which we will assume to be **/tmp**:

ubuntu@ip-172-31-92-227:~$ cd /tmp

ubuntu@ip-172-31-92-227:/tmp$ echo echo Hello, This is MY ls program > ls

ubuntu@ip-172-31-92-227:/tmp$ chmod +x ls

ubuntu@ip-172-31-92-227:/tmp$ ./ls

Hello, This is MY ls program

ubuntu@ip-172-31-92-227:/tmp$ export PATH=/tmp:$PATH

ubuntu@ip-172-31-92-227:/tmp$ ls

Hello, This is MY ls program