Filesystem hierarchy system

1. /

- This is top level directory
- It is parent directory for all other directories
- It is called as ROOT directory
- It is represented by forward slash (/)
- C:\ of windows

Filesystem hierarchy system

2. /root

- it is home directory for root user (super user)
- It provides working environment for root user
- C:\Documents and Settings\Administrator

Filesystem hierarchy system

3. /home

- it is home directory for other users
- It provide working environment for other users (other than root)
- c:\Documents and Settings\username

Filesystem hierarchy system

4. /boot

➢ Contains the static bootloader and kernel executable and configuration files required to boot a Linux computer.

Filesystem hierarchy system

5. /etc

➢ Contains the local system configuration files for the host computer.

➢ C:\windows\system32\drivers\

Filesystem hierarchy system

6. /usr

➢ by default soft wares are installed in /usr directory (UNIX Sharable Resources)

➢ c:\program files

Filesystem hierarchy system

7. /opt

- It is optional directory for /usr
- It contains third party softwares
- c:\program files

Filesystem hierarchy system

8. /bin

- it contains commands used by all users

  (Binary files)

9. /sbin

- it contains commands used by only Super User (root)

  (Super user's binary files)

Filesystem hierarchy system

10. /dev

- This directory contains the device files for every hardware device attached to the system.
- These are not device drivers rather they are files that represent each device on the computer and facilitate access to those devices.
- Similar to device manager of windows

Filesystem hierarchy system

11. /proc

- /proc like /dev is a virtual directory.
- It contains information about our computer such as information about our CPU and the kernel our Linux system is running.

Filesystem hierarchy system

- As with /dev the files and directories are generated when our computer starts or on the fly as our system is running and things change.

Filesystem hierarchy system

12. /var

- Variable data files are stored here.
- This can include things like log files, MySQL and other database files, web server data files, email inboxes and much more.

Filesystem hierarchy system

13. /tmp

- Temporary directory.
- Used by the operating system and many programs to store temporary files.
- Users may also store files here temporarily.
- Note that files stored here may be deleted at any time without prior notice.

Filesystem hierarchy system

14. /mnt

➢ A temporary mount point for regular filesystems (as in not removable media) that can be used while the administrator is repairing or working on a filesystem.

Filesystem hierarchy system

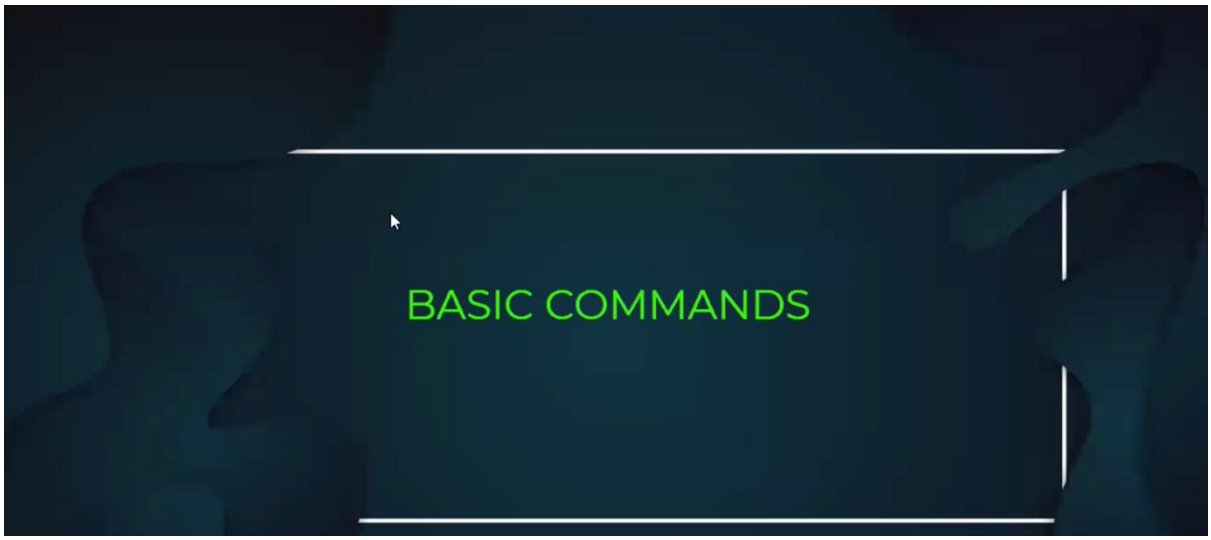
15. /media

➢ A place to mount external removable media devices such as USB thumb drives that may be connected to the host.

Filesystem hierarchy system

16. /lib

- Contains shared library files that are required to boot the system.
- It is similar to dll files of windows



pwd

1. pwd command stands for print working directory.
2. It displays the current working location or directory of the user

➢ # pwd

➢ press enter

ls

1. ls stands for list.
2. It will show the full list or content of our directory

➢ # ls

➢ press enter

ls options

1. ls -a

- It will give us the whole list of directory including the hidden files also.
- In linux hidden files start with a dot(.) and can't be seen in the regular directory.

ls options

2. ls -l

- It will show the list in a long list format
- long list format have 7 columns
- column 1 indicates information regarding file permission
- column 2 indicates the no. of links to the file

ls options

- column 3 & 4 indicates the owner and group information
- column 5 indicates the size of file in bytes
- column 6 shows the date and time on which the file was recently modified
- column 7 shows the file or directory name

ls options

3. ls -lr
- Listing of all files and directories in reverse order
4. ls -li
- This command prints the index number if file is in the first column
5. ls -l <file name>
- To see the permissions of a particular file

ls options

6. ls -ld <directory name>

➢ To see the permissions of a particular directory

7. ls -R

➢ shows the list of files in tree structure

Creation of Files

By using three methods we can create files

➢ cat command

➢ touch command

➢ vi editor

cat command

cat (Concatenate) command is used to create a file and to display and append the contents of a file.

1. To create a file type like below:

- # cat > <filename>
- Hello World
- press enter
- ctrl+d (To save the file)

cat command

3. To append the data in the already existing file type like below:

- # cat >> <filename>
- welcome
- press enter
- ctrl+d (to save the changes)

cat command

4. To transfer the contents of file 1 & file 2 to file 3 type like below:

- # cat <file1> <file2> >> <file3>
- press enter