boot options in linux

grub --> grand uniform bootloader
lilo --> linux loader

now most of the linux os use the grub boot loader because:

A. initialization time control
B. in grub boot loader give priority to the linux os in case of the dual boot
C. impossible to break the grub password
D. very secure

location of the grub configuration file

in redhat 7 it is located in **/etc/grub2.cfg**
in previous red hat distribution it is **/etc/grub.conf**
if we search for timeout option by this command
=>ls grub2.cfg | grep timeout
we will find that
timeout=5
so it wait 5 seconds after that it will automatically boot and we can lower the value of the boot time

linux directory structure

if we go to the mount point we get

=> **/**

under this partition we get
bin,etc,boot,dev,fome,lib,mnt,opt,proc,sbin,var folder .this is under the root (/)pertition

white colored resources ------------>file
blue color resources   -------------> folder
green color resources   --------------> executable file
block color red   ----------------->run level file(or running file)

showing hidden file

=> ls -a

if we put a **'.'** before a file or maybe a folder it will be a hidden file/folder

different folder explained

1)bin ----------->[binary executable file lies here if the folder is removed no command will work
2)boot ---------->[initialization file kernel file stay in here]
3)dev ----------->[hardware related file remains here if the dev folder is missing os can detect the hardware]
4)etc ------------> all the linux conf file remains here
5)home ------------->linux users file lies in here different different users have different different users folder in here
5)lib-------------> library related dependency file stay in here
7)lib64 -------------> 64 bit compatable library file stored in here
8)media ------------->extarnal periferals run script file stored in here

9)mnt -------------->extarnal devices like flash drive and cd rom mounted in here

10)opt -------------> third party binary file located in here

11)proc-------------> temp conf file during the boot process lies here process related file

12)root------------->administrator home directory

13)run -------------> running files in os lies here

14)sbin -------------> system binary file located in here

15)srv -------------> server related file stay in here

16)tmp -------------> temporary file like the recycle bin file stay in here

17)usr -------------> user related linking file stay in here

18)var -------------> variable related mail stored ion here to configure a mail server we need to give larger space in this folder

run level file

runlevel file is stored in the /etc/inittab file

user accounts:

role of root:

administrator in the linux system is called root.root can do any modification creation deletetion of the system

user information:

when a user is created there four place the information is stored

1) /etc/shadow

2) /etc/passwd

3) /var/spool/mail

4) /home

user can be created in two way:

when the system create the user the id must be between **0 to 999** and the **root id=0** and if the administrator manualy create the user accounts they have the id between **1000 to ~**

if we go to the **/etc/passwd** we see this kind of line

root:x:0:0:root:/root:/bin/bash

lets divide it to understand:

1)root --->user name
2)x   --->encryption
3)0   --->user id
4)0   --->group id
5)root --->level name
6)/root --> home directory
7)/bin/bash --> shell

in the **/etc/shadow** file we see some thing like this:

root6IDdJWI5Zhjz4Efdi$Cpu/K8RVv4cLwS4DllHKqzkZn8r vIyyf6XnjbsLLcpSv0Axn.xbBv50

this is actually the encrypted password file

user creation

adding user:

==> **useradd <name>**
==> **passwd <password_for_the_user>**
after that if we fo to the 4 location we will find four different entry in the four location
/etc/passwd
/etc/shadow
we will see the there are entry in two different file and two folder in
/home
/var/spool/mail

delete users:

==>**userdel <username>**

now if we do that the user will not be completely delete we have to manually delete the home folders user directory and the users folder in **/var/spool/mail** directory

 =>**rm -rf /var/spool/mail/<user_directory>**
=>**rm -rf /home/<user_directory>**

alternative method:
=>**userdel -r <user_name>**
this will delete all the entry automatically