at = for one time
cron = for again & again
Tndcron = for look after the cron.

service crond restart

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Linux

at (or)

scheduling Future Jobs. (cronJobs)

at 11:45PM
at> mkdir /root/desktop/abc
ctrl + D (save)
at -l
atq (to check scheduling)
at -c 1

# at now +2min
# at teatime tomorrow.
# at 6pm august 30 2019.
# atq
# atrm i → Job ID (remove job)
# vim /etc/at.deny (block user to run at command)
# systemctl status crond.
# cat /etc/crontab
# crontab -e
i = insert

/etc/cron.d

5th min) 5 * * * * touch /root/testcrob{1..20}
min) * * * * * touch /root/127.txt.
:wq
vi example. (username)
cd /var/spool/cron → vi root

*	*	*	*	*
min	hour	date	month	day of week

0 Sunday
1 Monday

/etc/at.allow.

cron tab key
tail -f /var/log/cron

SELinux

Selinux - Security Enhanced linux.
enforcing, permission and disable.
cat /etc/selinux/config

ls -lZ.

unconfined_u: object_r: user_home_t: s0
user base, role base, type level

cat /etc/selinux/targeted/selrents.conf

getenforce (selinux permission)
sestatus (selinux details)
setenforce 0
getenforce (permissive mode)
setenforce 1
getenforce (enforce mode)

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nmcli → Network manager

nmcli connection show

nmcli connection modify ens33 ipv4.address 192.168.1.25/24 ipv4.gateway 192.168.1.1 ipv4.dns 192.168.1.2 +ipv4.dns 8.8.8.8 connection.autoconnect yes method manual

cat /etc/sysconfig/network-scripts/ifcfg-ens33

nmcli connection up ens33.

nmtui (GUI)

nmtui

nmtui edit ens33

nmtui-hostname (Change host-name)

nmtui-connect

Teacher's Signature .....

Redirecting output to a file or program

stdin - 0
stdout - 1
stderr - 2
ls /root → (try from other user)
ls /root 2> /tmp/errors

stdout - 1>, 2>, 2>&1

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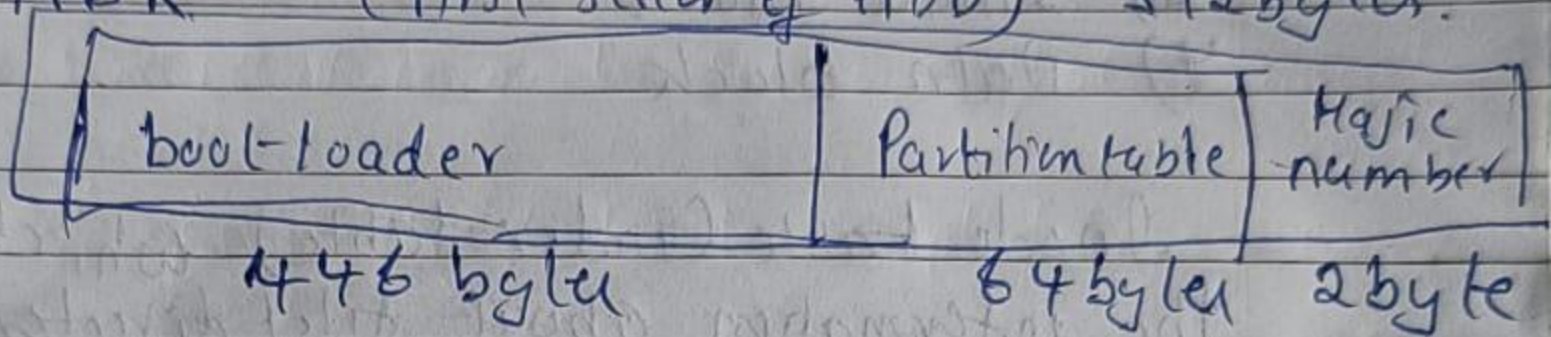
Boot process in linux

1. power button
2. Post
3. BIOS (boot-process) cdrom, HDD, pendrive
4. MBR (First sector of HDD) 512 bytes.



5. Grub

Stage 1 : boot.img
Stage 1.5 : First partition of hard drive begins at sector 63 which stores core.img
Stage 2 : GRUB 2 stage is to locate and load a linux kernel into RAM

6. kernel
   /sysroot mount point as read-only
7. systemd.
   start systemd process. (System call)
8. target
   # systemctl list-unit --type target
   # systemctl set-default name.target
9. Username & password

Teacher's Signature .....

Soft link and hard link.

File system block

1) Master block / boot block
2) Super block
3) Inode block
4) Data block

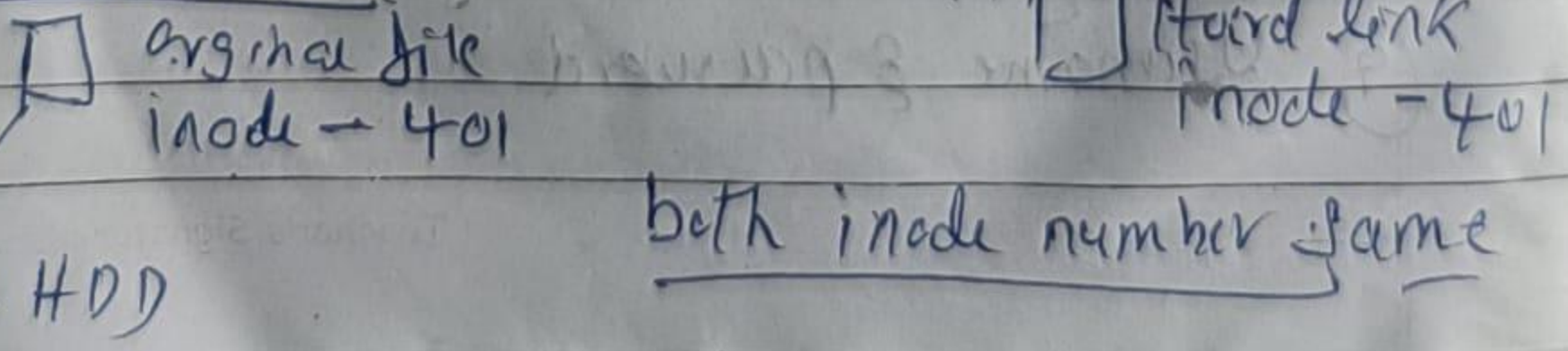
Inode table (index table) which holds all the information about file/directory like permissions, owners, group name, size and time stamps.

4096 byte default size
15 data blocks = inode.

More than 100MB block size = 4096 bytes
less than 100MB block size = 1024 bytes

Soft link (shortcut)

Hard link



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ln -s softlink linktosoft

stat softlink
stat linktosoft

ln hardlink tohardlink
stat hardlink
stat tohardlink

Teacher's Signature .....

SCP (Secure copy)

#scp filename username@server-ip:/destination

directory copy

#scp -r links root@192.168.1.2:/root/

Compress and send data

#scp -C filename username@server-ip:/destination

KVM

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yum install qemu-kvm qemu-img libvirt-virt-install libvirt-python virt-manager. virt-install libvirt-client virt-viewer.

systemctl start libvirt-guests.service
systemctl start libvirtd

virt-manger.

---

1) yum groups list
2) yum group install "virtualization Host"
3) systemctl restart libvirtd. enable.
4) yum install virt-manger.
5) virt-manger.