PARTITIONS
We can create the partition at the time of installation and also after installation.
If we create the partition at the time of installation then it uses the Disk Druid Tool.
To create the partition after installation we have the tools like fdisk, parted, sfdisk etc...
To create the partition after installation we have to follow the below steps;
I. Create
2. Format
3. Mount
4. Use

To see the partitions list => # fdisk -1
To create the partition => # fdisk /dev/sda
command(m for help): m to see other options
d - To delete a partition
n - To add a new partition
p - To print the partition table
q - quit without changes
t - To change a partition system id
w - Write to the partition table and exit
l - list known partition types

To update the partition table information to the kenel without restarting the system
partprobe /dev/sda

To format the partition in ext2 file system
1) # mkfs <partition-no.>
2) # mke2fs <partition-no.>
3) # mkfs -t ext2 <partition-no.>
4) # tnkfs.ext2 <partition-no.>
Ex : # mkfs.ext2 /dev/sda6.

To Format the partition in ext3 file system
1) # mke2fs -j <partition - no.>
2) # mkfs -j < partition - no.>
3) # mkfs -t ext3 <partition - no.>
4) # mkfs.ext3 <partition-no.

To Format the partition
mkfs.ext3 /dev/sda6

To Create the mount point
mkdir /unix

To Mount
mount <partition - no.> < mount-point>
 Ex : # mount /dev/sda6 /unix

To see the mounting point information
mount : #df -h

Last + Found :- It keeps the unsaved files information.

To mount permanently
vi /etc/fstab
/dev/sda6   /unix   ext3   defaults   0   0

Note :
Temporary mounting point information maintains in the file /etc/mtab.
permanent information main-tains in /etc/fstab file.

To unmount the partition
umount <mount-point>
 Ex : # unmount /unix

To check the partition details
blkid <partition-no>
 ex : # blkid /dev/sda6

@@Mounting :
   Assaiging a access point to the file system is called as the mounting.
The file system can be accessed through the local mount point.Here the
mount point is a directory.

@@Differences between ext2 & ext3 file systems
          ext2   ext3
1. No Journal Facility   1. Supports the Jounal
2. More Speed   2. Less Speed
3. Less Secure   3. More Secure
4. Less Performance   4. More Performance

@@Tuning
Converting the file system from one type to another type is called as
Tuning. In Linux we can convert file system type from ext2 to ext3 and
viceversa without loss of data.

@@Journal
It was introduced by IBM. It is a concept used by the file system in
which it maintains the information about file.
i.e. inode number, data block etc. This is effectively use by O.S. At the
time of fsck.

@@FSCK
File stem check, similar to scandisk program in windows. In this it reads
the journal file and tries to restore the lost data.

@@Converting from ext2 to ext3 file system
Before converting we must un mount the partition.
unmount /unix
tune2fs -j /dev/hda

@@Converting from ext3 to ext2 file system :
unmount /unix
tune2fs -O ^ has_journal /dev/sda6

* To assign the label :
  # e2label /dev/sda6 /songs
* To check the label of partition :
  # e2label /dev/sda6
* To see the mountpoint information along with labels :
  # mount -l
* To delete the partition => d
Before deleting the partition, we have to unmount the partition.

@@Swap Partition:-

The swap file system is different then ext2 & ext3 file system. While installation we can assign the swap mamory as double size of the RAM . After installation if you need the more swap memory then you can increase the swap memory by using partitions.
If your pc has 2GB ram then no need of Swap Memory. In case you need you can assign swap as the same size of RAM.

To create the partition with 1GB size.
I) fdisk /dev/sda
2)(m for help) : n
3) : +1g
4) : w
update the kernel s with out restarting #partprobe /dev/sda.

format the partition with swap file system
mkswap /dev/sda7
swapon -s

To enable the swap partition
swapon /dev/sda7

To check the swap memory information
vmstat

To disable the swap partition
swapoff /dev/sda7

To mount the floppy drive
mount /dev/fd0 /mnt

To mount the CD
mount /dev/cdrom /mnt

To mount the DVD
mount /dev/dvd /mnt

To mount the pendrive
mount /dev/sdal /mnt

To mount the IDE Tape drive
mount /dev/ht0 /mnt

To mount the SCSI Top drive
mount /dev/stO /mnt