*Mounting and Unmounting

-> The mount command is used to attach a file system somewhere within the filesystem tree.

-> The basic arguments are device node and mount point. for example

```
$ sudo mount /dev/sda5 /home
```

-> will attach the file system contained in the disk partition associated with the /dev/sda5 device node into the file system tree at the /home mount point.

-> There are other ways to specify the partition other than the device node, such as the label or UUID (Universally Unique Identifier).

-> To unmount the partition, the command would be

```
$ sudo unmount /home
```

* NFS and Network File Systems

-> many system administrators mount remote users home directories on a server in order to give them access to the same file configuration. across multiple client systems.

-> This allows the users to log in to diffrent computers, yet still have access to the same file resources.

-> The most comman such files is named simply NFS (the network file system).

* NFS on the Servers

-> on the Server machine, NFS uses daemons (built-in networking and service Process in linux). and other systems servers are started at the command line by typing.

```
$ sudo systemctl start nfs
```

Note:- RHEL | centos, Fedora, the service is now called nfs-server not nfs.

→ The text file /etc/exports contains the directories and Permission that host is willing to share with other system over NFS.

→ A very simple entry in this file may look like the following

/projects *.example.com(rw)

→ This entry allows the directory /projects to be mounted using NFS with read and write (rw) Permissions and shared with other hosts in the example.com domain.

→ After modifying /etc/exports file, you can type exports -av to notify Linux about the directories you are allowing remotly mounted using NFS.

→ You can also restart NFS with sudo systemctl restart nfs but this is heavier

→ To make sure the NFS service starts whenever the system is booted, issue

sudo systemctl enable nfs.

* NFS on the client

-> on the client machine, If it is desired to have remote file system mounted automatically upon system boot /etc/fstab is modified to accomplish this.

-> For example, an entry in client /etc/fstab might look like the following

servername : /projects
/mnt/nfs/projects nfs defauls 0 0

-> you can mount the remote file system without reboot or as a one-time mount by directly using the mount command.

$ sudo mount servername : /projects
/mnt/nfs/projects.