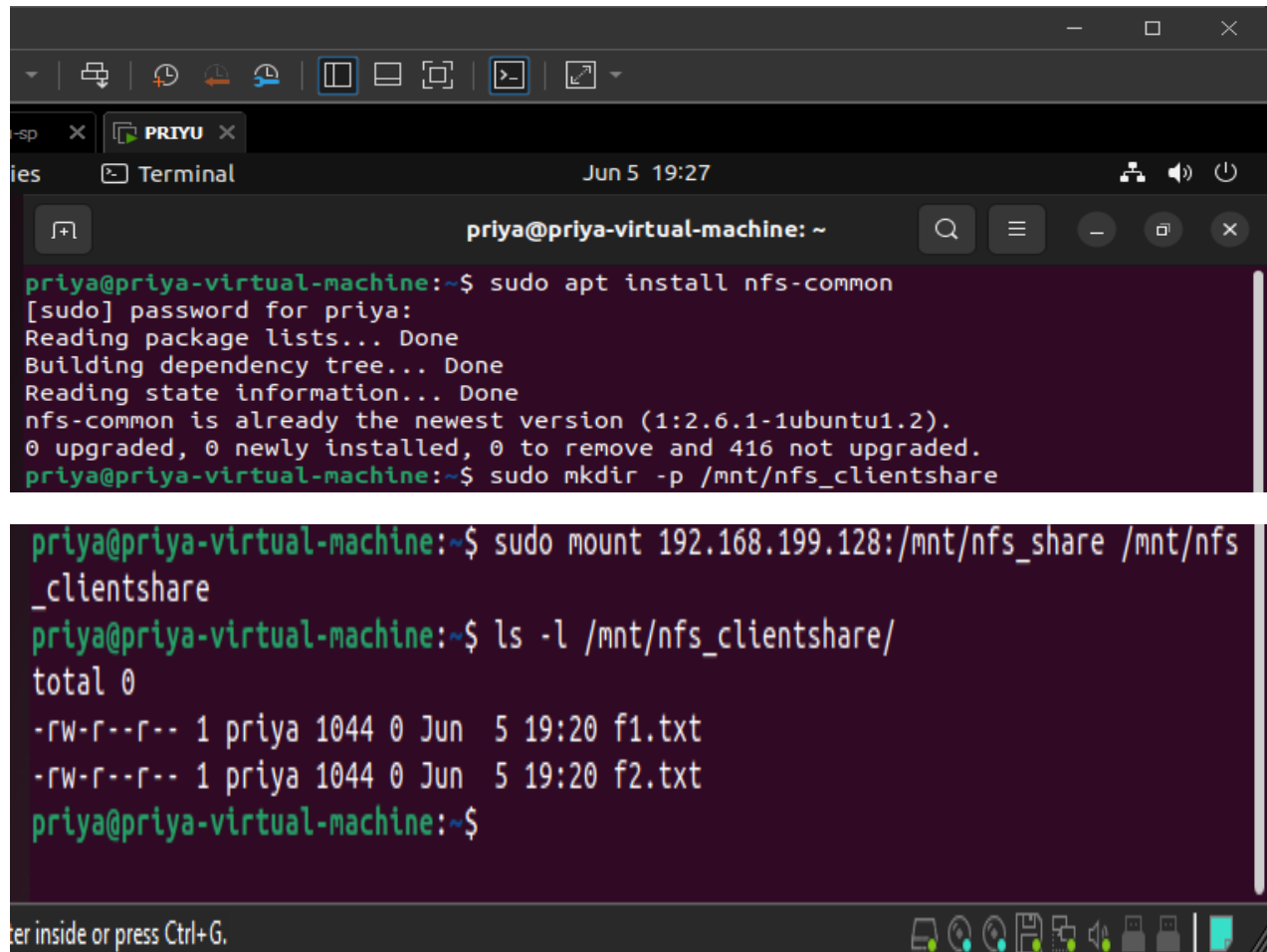# Network file system

NFS (Network File System) is a protocol that allows you to share files and directories over a network between Linux/Unix systems — so one system can access files from another as if they were local.

Ubuntu1 server machine

```
 1  sudo apt install nfs-kernel-server -y

 2  sudo mkdir -p /mnt/nfs_share

 3  sudo chown -R nobody:nogroup /mnt/nfs_share

 4  sudo chmod 777 /mnt/nfs_share/

 5  sudo nano /etc/exports

 6  sudo exportfs -a

 7  sudo systemctl restart nfs-kernel-server

 8  sudo systemctl enable nfs-kernel-server

 9  sudo ufw alow from 192.168.199.0/24 to any port nfs

10 cd /mnt/nfs_share/

11  touch f1.txt f2.txt
```

Ubuntu2 client machine


```
priya@priya-virtual-machine:~$ sudo apt install nfs-common
[sudo] password for priya:
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
nfs-common is already the newest version (1:2.6.1-1ubuntu1.2).
0 upgraded, 0 newly installed, 0 to remove and 416 not upgraded.
priya@priya-virtual-machine:~$ sudo mkdir -p /mnt/nfs_clientshare
```

```
priya@priya-virtual-machine:~$ sudo mount 192.168.199.128:/mnt/nfs_share /mnt/nfs
_clientshare
priya@priya-virtual-machine:~$ ls -l /mnt/nfs_clientshare/
total 0
-rw-r--r-- 1 priya 1044 0 Jun  5 19:20 f1.txt
-rw-r--r-- 1 priya 1044 0 Jun  5 19:20 f2.txt
priya@priya-virtual-machine:~$
```

Role	System	Action
NFS Server	Ubuntu1	Shares folder using /etc/exports
NFS Client	Ubuntu2	Mounts shared folder using mount command
Access Files	Ubuntu2	Reads/writes files in that folder like normal