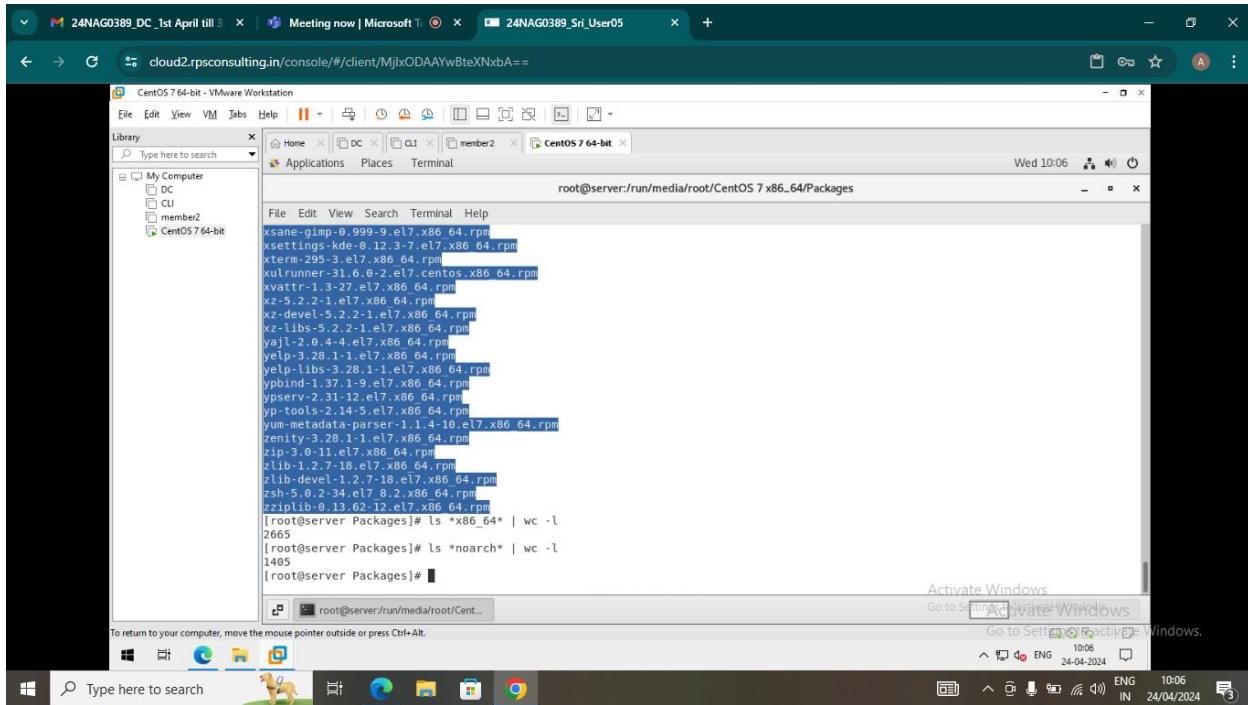


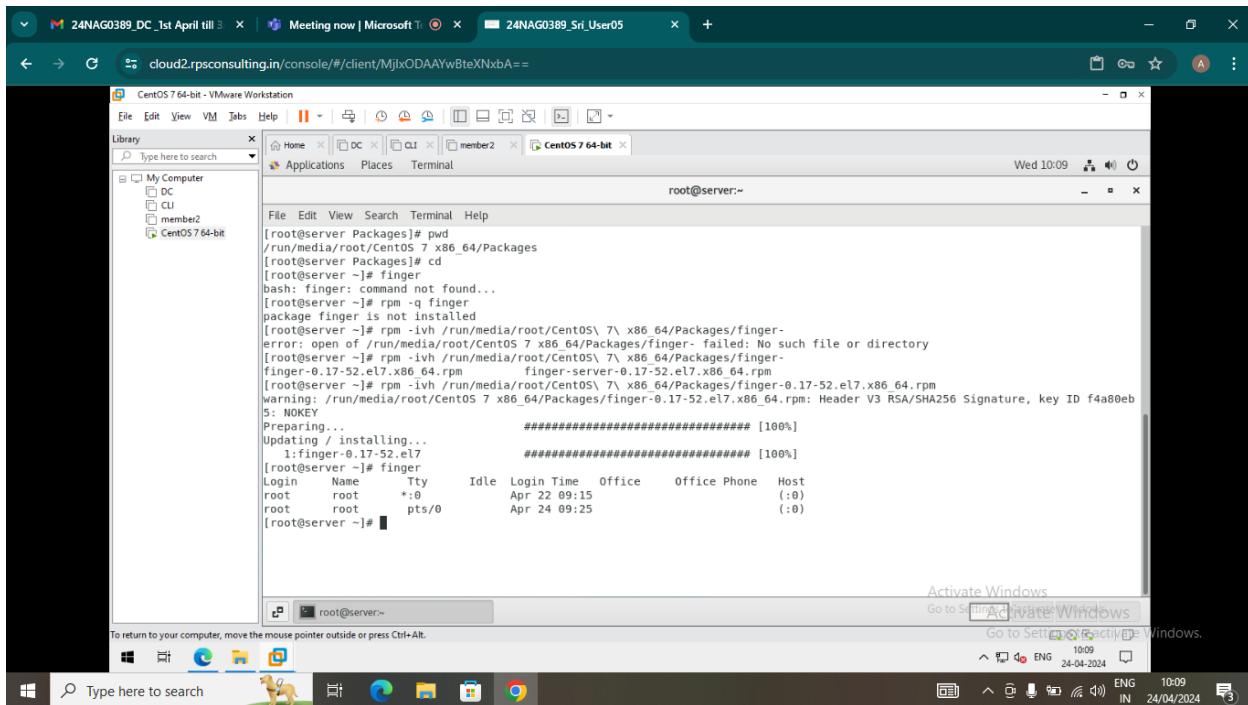
LINUX DAY-3

Counting the packages .



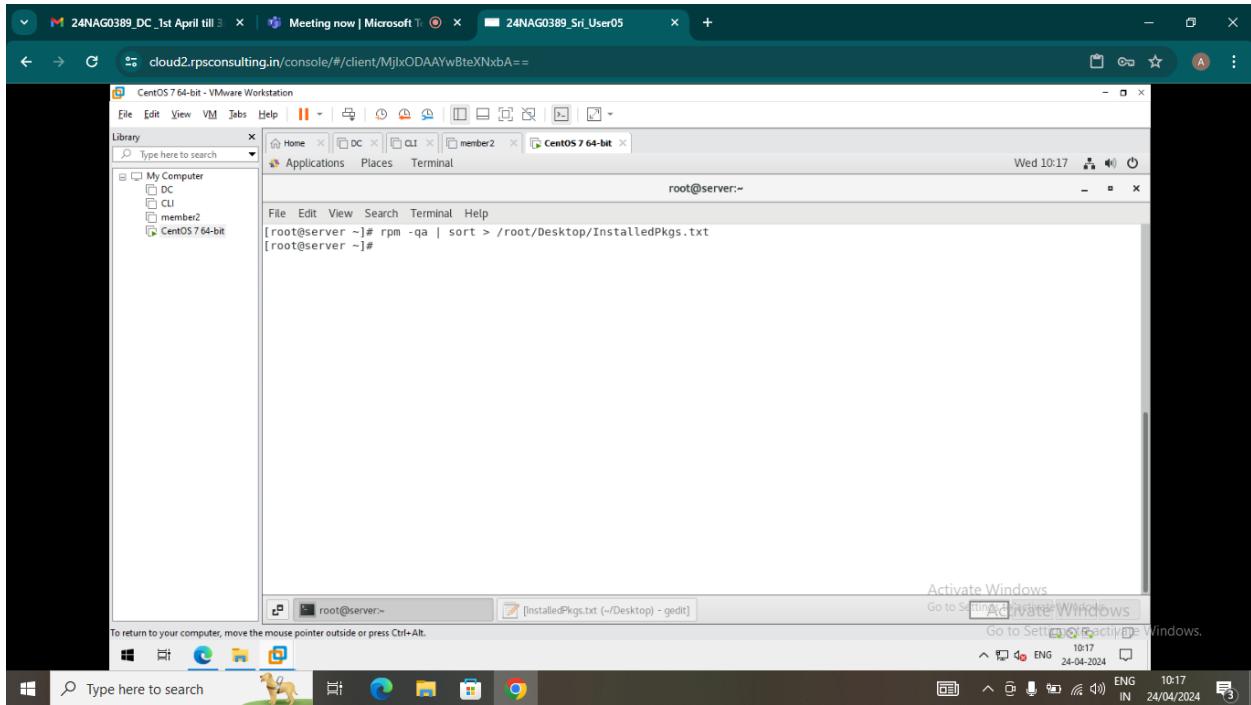
```
root@server:/run/media/root/CentOS 7 x86_64/Packages
xsan-gimp-0.999-9.el7.x86_64.rpm
xsettings-kde-0.12.3-7.el7.x86_64.rpm
xterm-299-3.el7.x86_64.rpm
xulrunner-31.6.0-2.el7.centos.x86_64.rpm
xvattr-1.3-27.el7.x86_64.rpm
xz-5.2.5-1.el7.x86_64.rpm
xz-devel-5.2.5-1.el7.x86_64.rpm
xz-ltbs-5.2.2-1.el7.x86_64.rpm
xz-libs-5.2.2-1.el7.x86_64.rpm
yaml-0.2.0-4.el7.x86_64.rpm
yelp-3.38.1-1.el7.x86_64.rpm
yelp-xsl-3.38.1-1.el7.x86_64.rpm
ybpbnd-1.37-1.el7.x86_64.rpm
ypserv-2.31-12.el7.x86_64.rpm
yptools-2.14-5.el7.x86_64.rpm
yum-metadata-parser-1.4-10.el7.x86_64.rpm
zenity-3.28.1-1.el7.x86_64.rpm
zip-3.9-11.el7.x86_64.rpm
zlib-devel-1.2.7-18.el7.x86_64.rpm
zsh-5.0.2-34.el7.8.2.x86_64.rpm
zziplib-0.13.62-12.el7.x86_64.rpm
[root@server Packages]# ls *x86_64* | wc -l
2665
[root@server Packages]# ls *noarch* | wc -l
1495
[root@server Packages]#
```

Looking on user informations usin “finger” command.

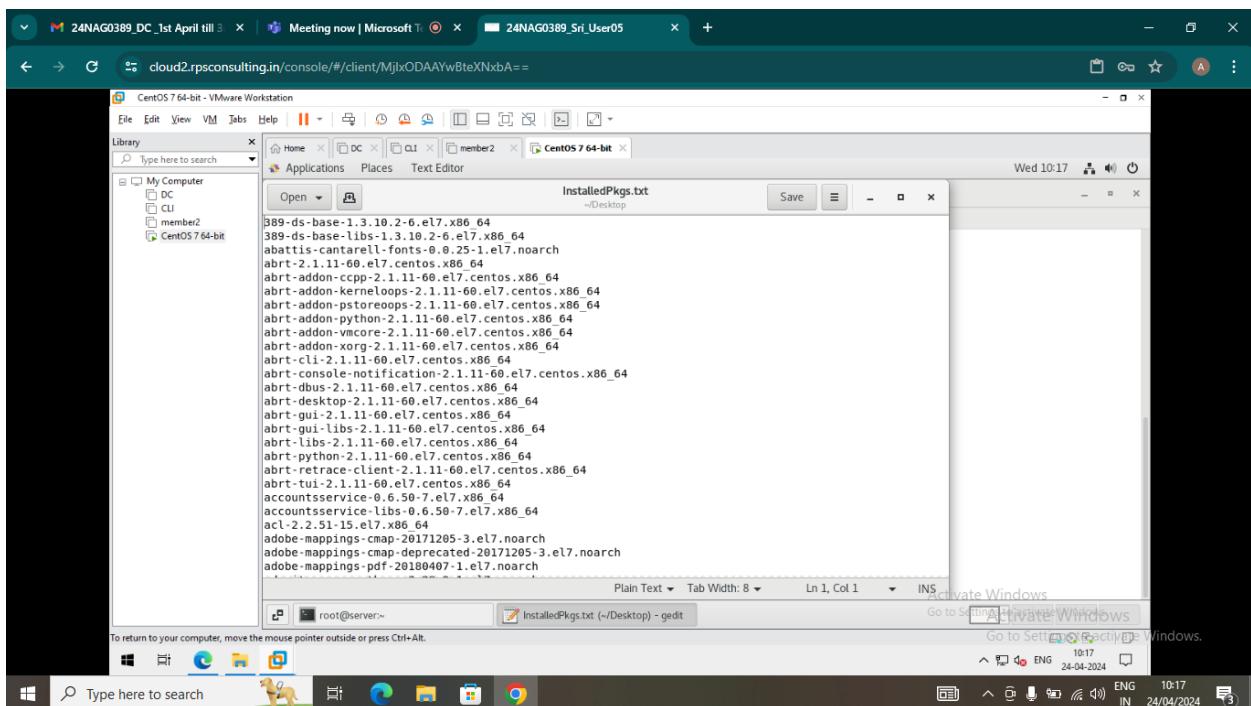


```
[root@server Packages]# pwd
/run/media/root/CentOS 7 x86_64/Packages
[root@server Packages]# cd
[root@server ~]# finger
bash: finger: command not found...
[root@server ~]# rpm -q finger
package finger is not installed
[root@server ~]# rpm -ivh /run/media/root/CentOS 7/x86_64/Packages/finger-
error: open of /run/media/root/CentOS 7/x86_64/Packages/finger: failed: No such file or directory
[root@server ~]# rpm -ivh /run/media/root/CentOS 7/x86_64/Packages/finger-
finger-0.17-52.el7.x86_64.rpm
[root@server ~]# rpm -ivh /run/media/root/CentOS 7/x86_64/Packages/finger-0.17-52.el7.x86_64.rpm
warning: /run/media/root/CentOS 7/x86_64/Packages/finger-0.17-52.el7.x86_64.rpm: Header V3 RSA/SHA256 Signature, key ID f4a80eb
5: NOKEY
Preparing...
Updating / installing...
1:finger-0.17-52.el7
[root@server ~]# finger
Login      Name          Tty      Idle   Login Time   Office   Office Phone   Host
root      root          *:0      Apr 22 09:15   (:0)
root      root          pts/0    Apr 24 09:25   (:0)
[root@server ~]#
```

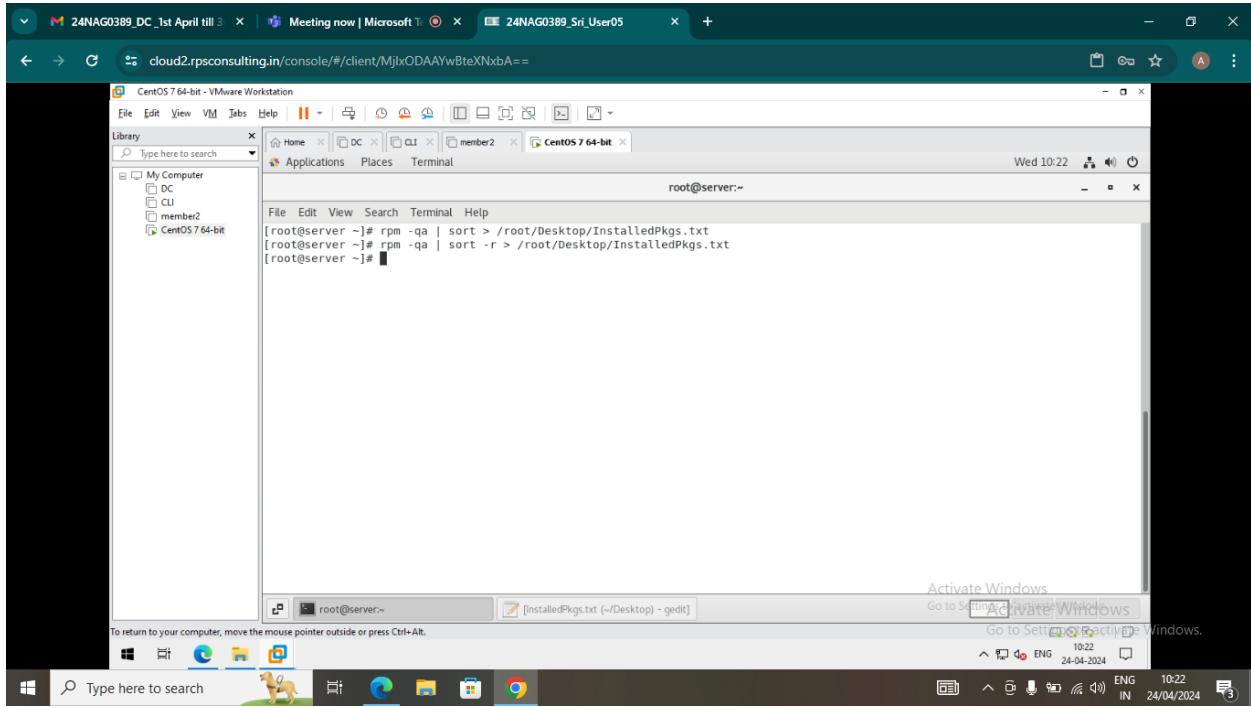
Sorting the installed packages in ascending order.



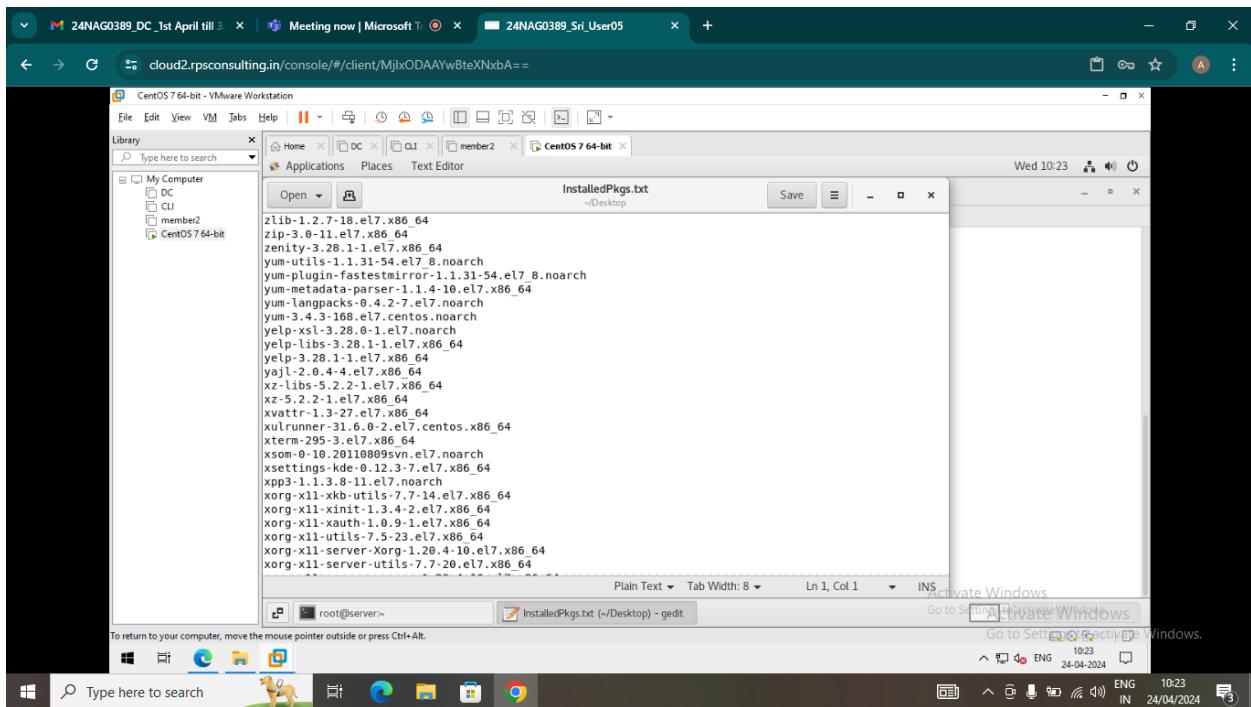
Packages that are arranged in ascending order



Sorting the installed packages in descending order



The packets are arranged in descending order



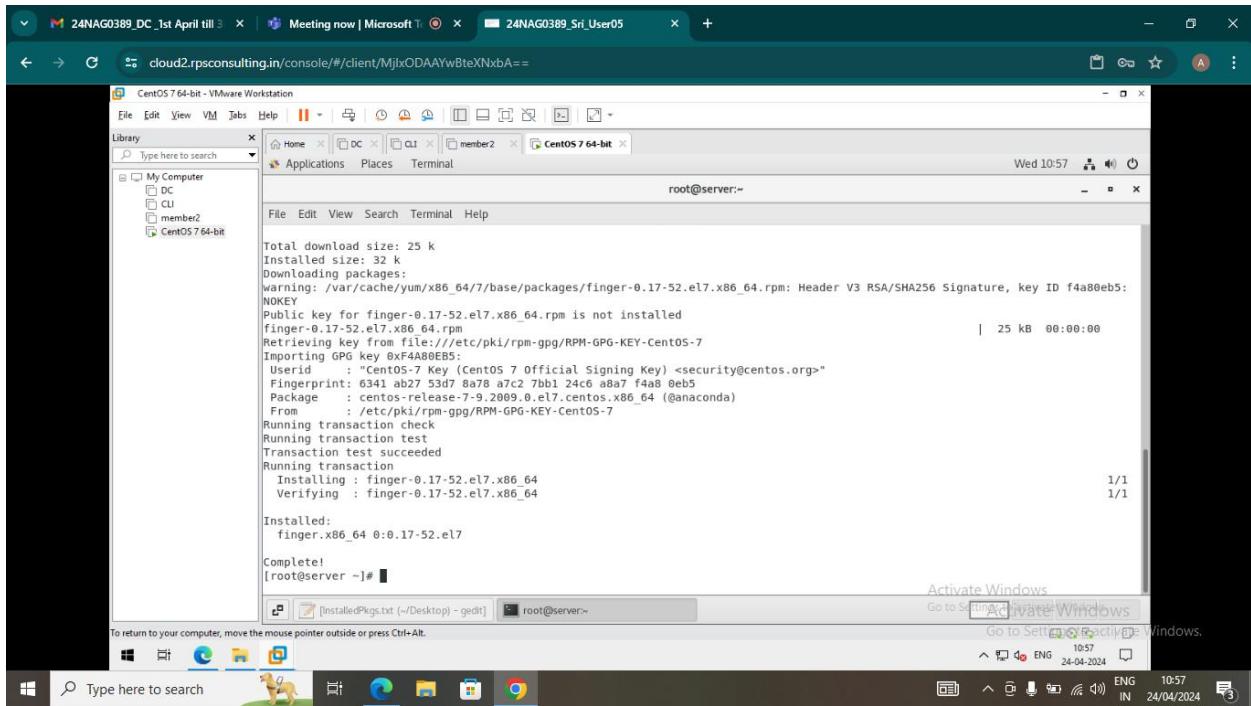
Deleting the packages

```
[root@server ~]# cd /run/media/root/CentOS\ 7/x86_64/Packages/  
bash: cd: /run/media/root/CentOS 7/x86_64/Packages/: No such file or directory  
[root@server ~]# cd /run/media/root/CentOS\ 7/x86_64/Packages/  
[root@server Packages]# ls finger*  
finger-0.17-52.el7.x86_64.rpm finger-server-0.17-52.el7.x86_64.rpm  
[root@server Packages]# rpm -Uvh finger-0.17-52.el7.x86_64.rpm  
warning: finger-0.17-52.el7.x86_64.rpm: Header V3 RSA/SHA256 Signature, key ID f4a80eb5: NOKEY  
Preparing... ################################ [100%]  
package finger-0.17-52.el7.x86_64 is already installed  
[root@server Packages]# rpm -q finger  
finger-0.17-52.el7.x86_64  
[root@server Packages]# rpm -e finger  
[root@server Packages]# rpm -q finger  
package finger is not installed  
[root@server Packages]#
```

Installing using yum

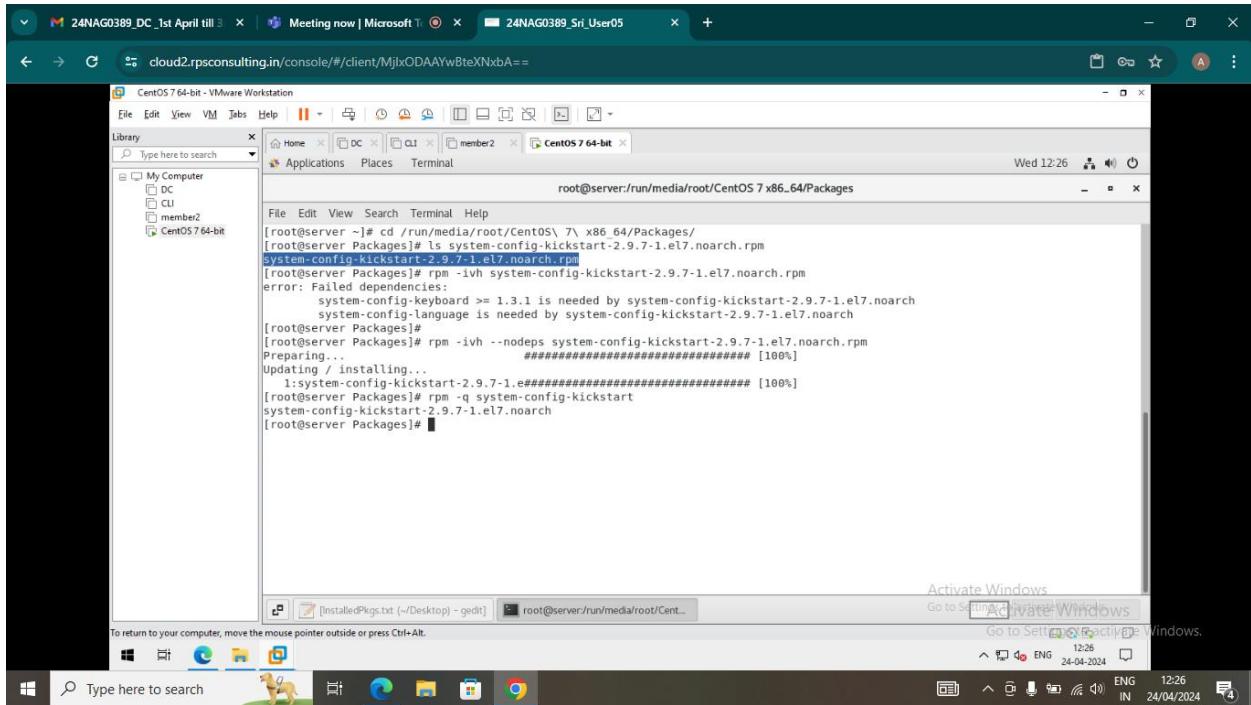
```
[root@server Packages]# clear  
[root@server Packages]# cd  
[root@server ~]# yum install finger -y  
Loaded plugins: fastestmirror, langpacks  
Loading mirror speeds from cached hostfile  
* base: centos.mirror.net.in  
* extras: centos.mirror.net.in  
* updates: centos.mirror.net.in  
Resolving Dependencies  
--> Running transaction check  
--> Package finger.x86_64 0:0.17-52.el7 will be installed  
--> Finished Dependency Resolution  
Dependencies Resolved  
  
=====  
Package           Arch      Version       Repository      Size  
=====  
Installing:  
finger            x86_64   0.17-52.el7    base          25 k  
Transaction Summary  
Install 1 Package  
  
Total download size: 25 k  
Installed size: 32 k  
[root@server ~]
```

Installation completed



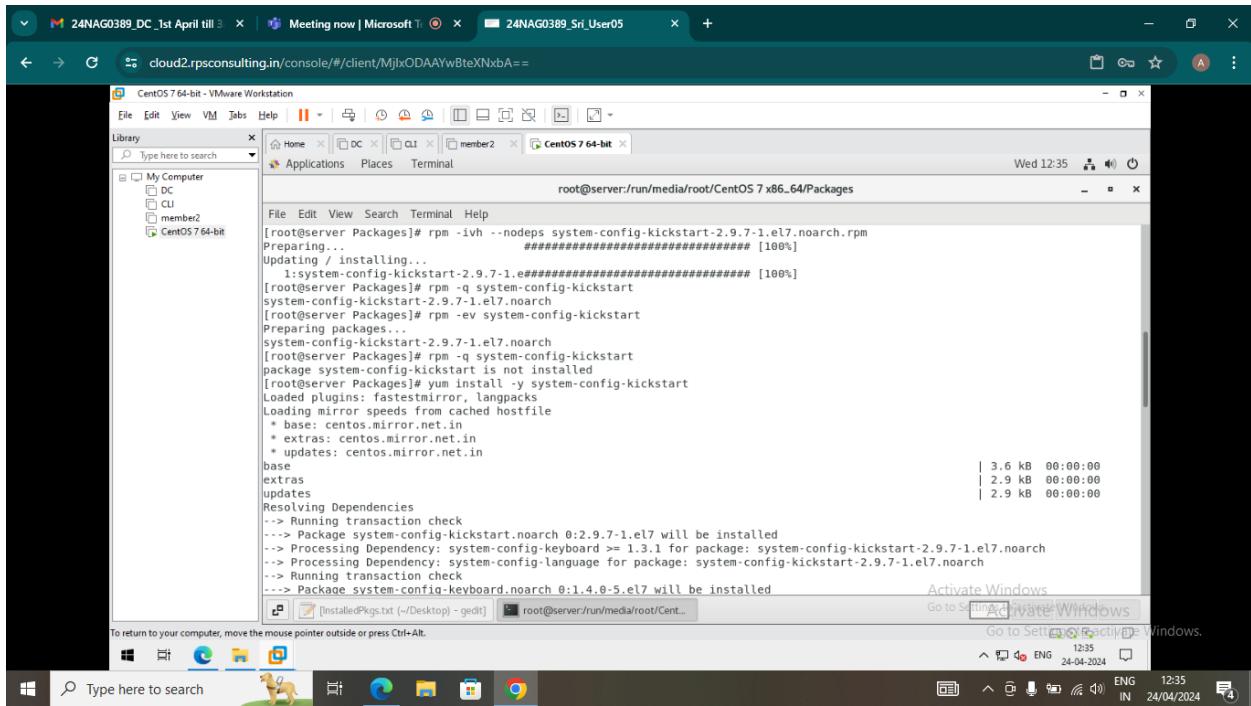
```
Total download size: 25 K
Installed size: 32 k
Downloading packages:
warning: /var/cache/yum/x86_64/7/base/packages/finger-0.17-52.el7.x86_64.rpm: Header V3 RSA/SHA256 Signature, key ID f4a80eb5: NOKEY
Public key for finger-0.17-52.el7.x86_64.rpm is not installed
finger-0.17-52.el7.x86_64.rpm
Retrieving key from file:///etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Importing GPG key 0xF4A80EB5:
Userid   : "CentOS-7 Key (CentOS 7 Official Signing Key) <security@centos.org>"
Fingerprint: 6341 ab27 53d7 8a78 a7c2 7b1 24c6 a8a7 f4a8 0eb5
Package   : centos-release-7-9.2009.0.el7.centos.x86_64 (@anaconda)
From     : /etc/pki/rpm-gpg/RPM-GPG-KEY-CentOS-7
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Installing : finger-0.17-52.el7.x86_64
  Verifying   : finger-0.17-52.el7.x86_64
1/1
1/1
Installed:
  finger.x86_64 0:0.17-52.el7
Complete!
[root@server ~]#
```

Installing packages using nodepends



```
[root@server ~]# cd /run/media/root/CentOS\ 7\ x86_64/Packages/
[root@server Packages]# ls system-config-kickstart-2.9.7-1.el7.noarch.rpm
system-config-kickstart-2.9.7-1.el7.noarch.rpm
[root@server Packages]# rpm -ivh system-config-kickstart-2.9.7-1.el7.noarch.rpm
error: Failed dependencies:
      system-config-keyboard >= 1.3.1 is needed by system-config-kickstart-2.9.7-1.el7.noarch
      system-config-language is needed by system-config-kickstart-2.9.7-1.el7.noarch
[root@server Packages]#
[root@server Packages]# rpm -ivh --nodeps system-config-kickstart-2.9.7-1.el7.noarch.rpm
Preparing...
# ################################################ [100%]
Updating / installing...
 1:system-config-kickstart-2.9.7-1.e#### [100%]
[root@server Packages]# rpm -q system-config-kickstart
system-config-kickstart-2.9.7-1.el7.noarch
[root@server Packages]#
```

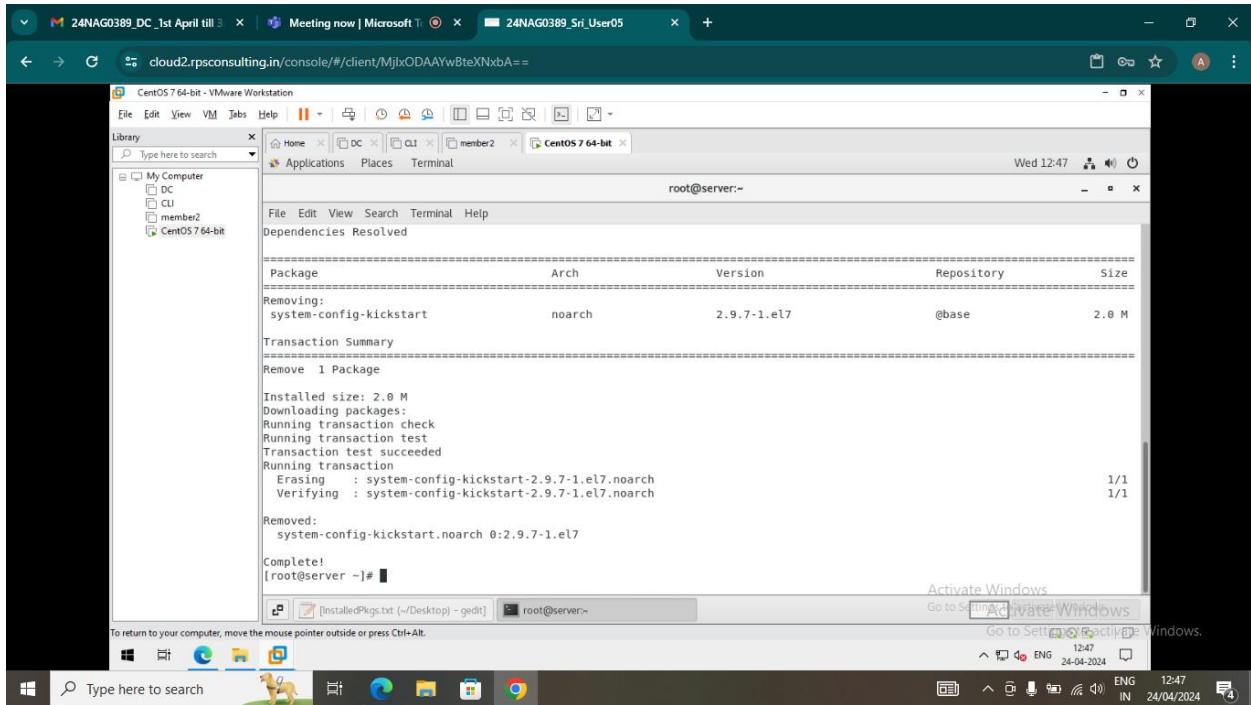
Deleting the packages that are installed using nodeps



```
[root@server Packages]# rpm -ivh --nodeps system-config-kickstart-2.9.7-1.el7.noarch.rpm
Preparing... ################################################ [100%]
Updating / installing...
 1:system-config-kickstart-2.9.7-1.el7.noarch ################################################ [100%]
[root@server Packages]# rpm -q system-config-kickstart
system-config-kickstart-2.9.7-1.el7.noarch
[root@server Packages]# rpm -ev system-config-kickstart
Preparing packages...
system-config-kickstart-2.9.7-1.el7.noarch
[root@server Packages]# rpm -q system-config-kickstart
package system-config-kickstart is not installed
[root@server Packages]# yum install -y system-config-kickstart
Loaded plugins: fastestmirror, langpacks
Loading mirror speeds from cached hostfile
* base: centos.mirror.net.in
* extras: centos.mirror.net.in
* updates: centos.mirror.net.in
base
extras
updates
Resolving Dependencies
--> Running transaction check
--> Package system-config-kickstart.noarch 0:2.9.7-1.el7 will be installed
--> Processing Dependency: system-config-keyboard >= 1.3.1 for package: system-config-kickstart-2.9.7-1.el7.noarch
--> Processing Dependency: system-config-language for package: system-config-kickstart-2.9.7-1.el7.noarch
--> Package system-config-keyboard.noarch 0:1.4.8-5.el7 will be installed

```

Uninstalling the packages using yum



```
Dependencies Resolved

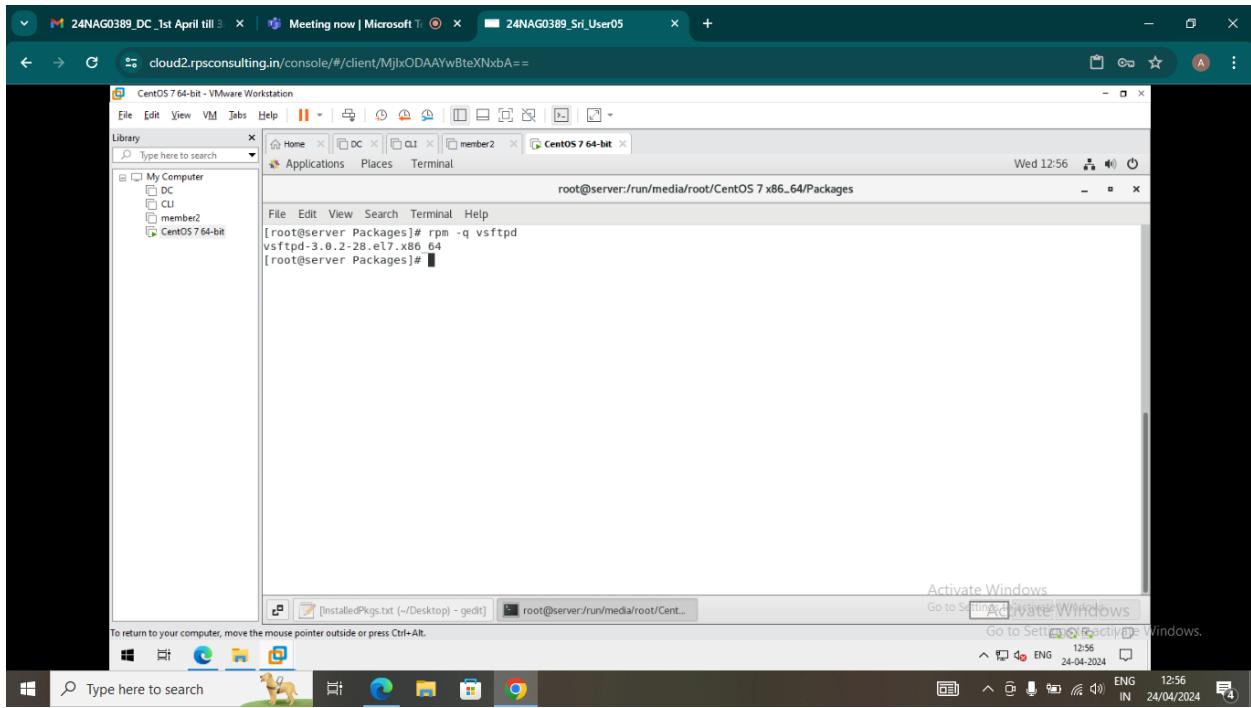
=====
Package           Arch      Version       Repository      Size
=====
Removing:
  system-config-kickstart    noarch   2.9.7-1.el7     @base        2.0 M

Transaction Summary
=====
Remove 1 Package

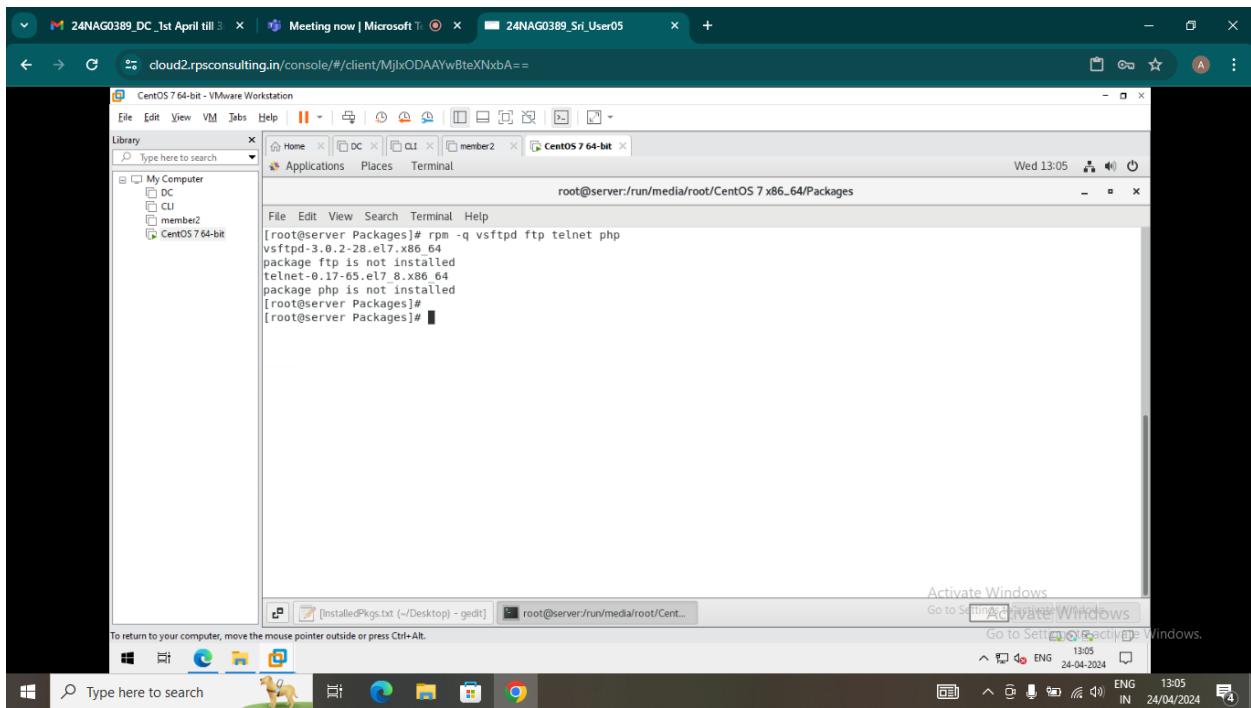
Installed size: 2.0 M
Downloading packages:
Running transaction check
Running transaction test
Transaction test succeeded
Running transaction
  Erasing   : system-config-kickstart-2.9.7-1.el7.noarch
  Verifying  : system-config-kickstart-2.9.7-1.el7.noarch
Removed:
  system-config-kickstart.noarch 0:2.9.7-1.el7

Complete!
[root@server ~]#
```

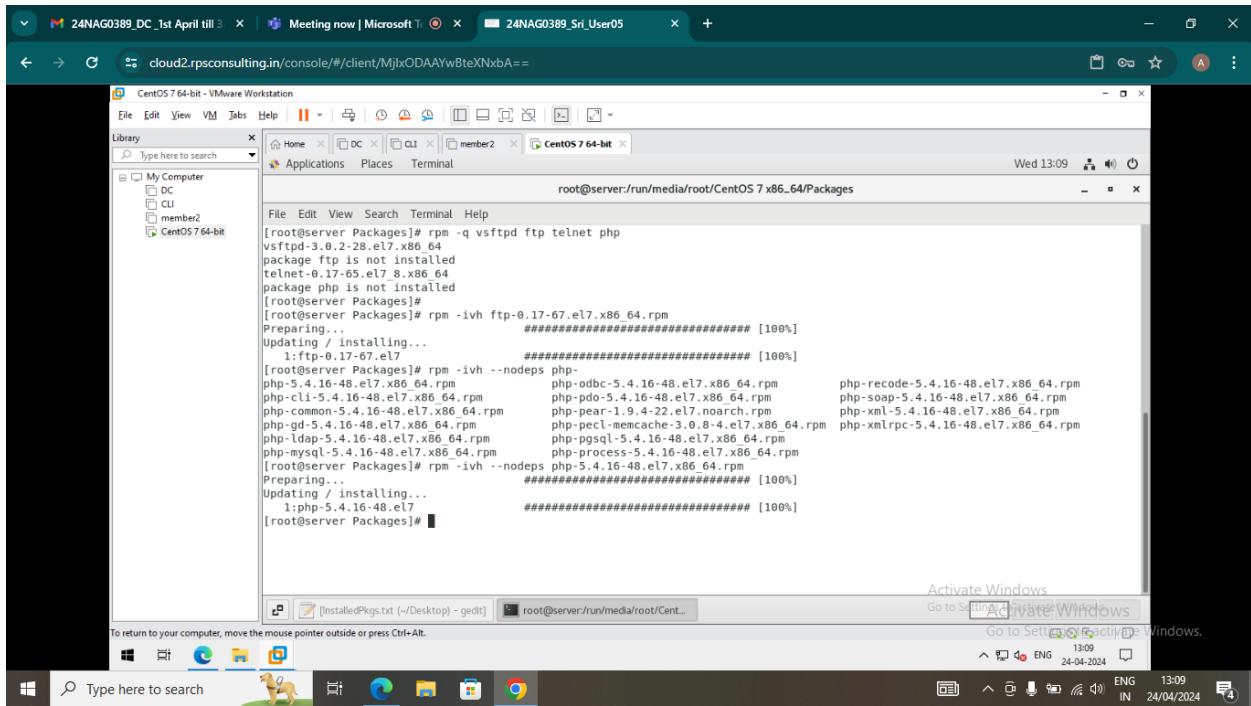
Verifying the packages are installed or not



Verifying all at once

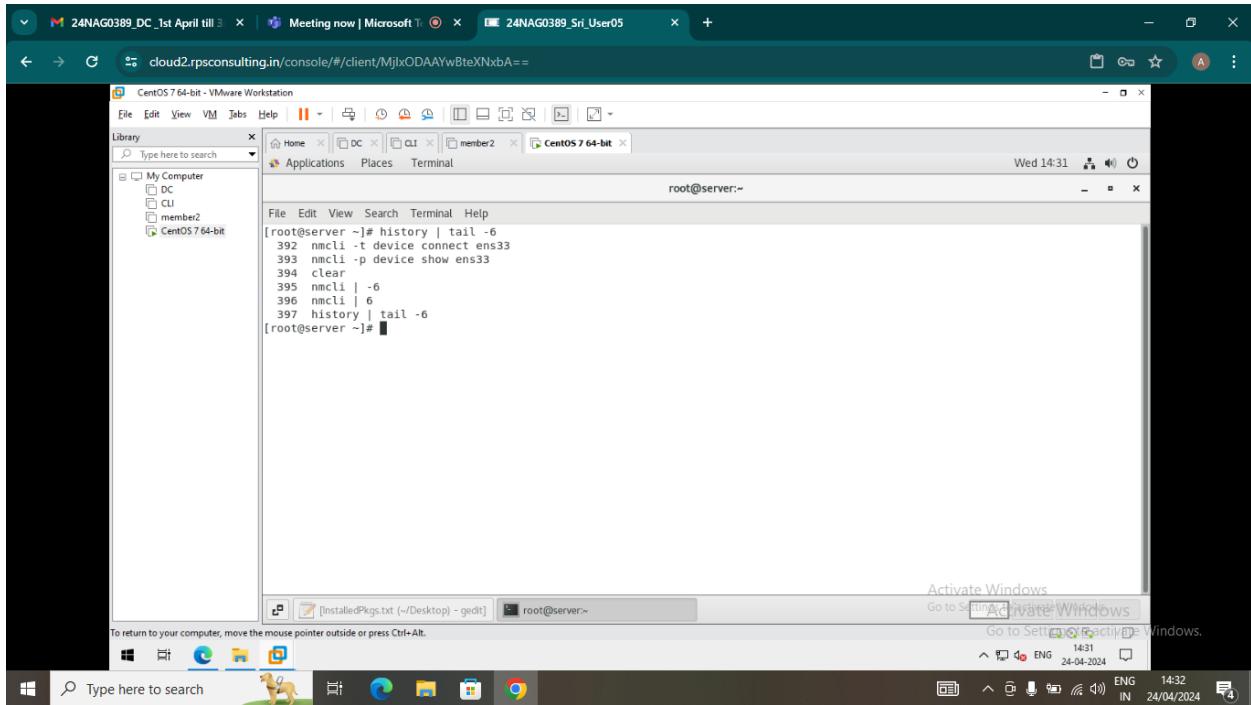


Installing ftp and php



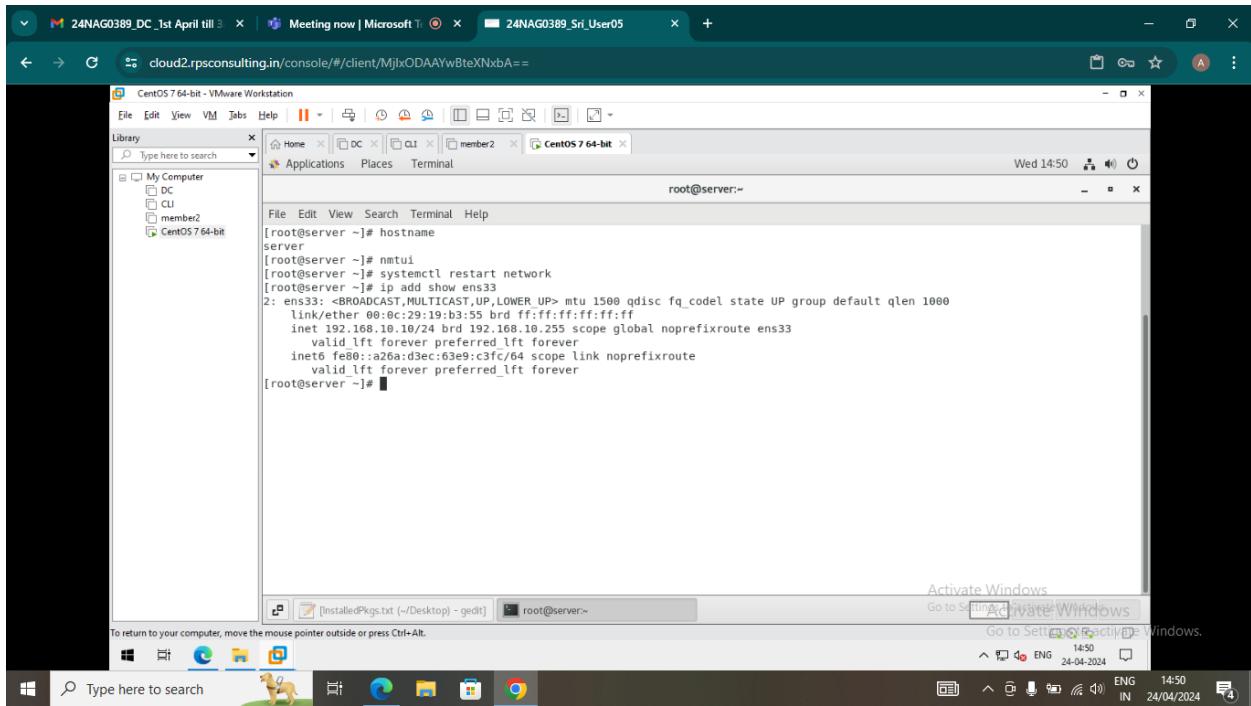
```
[root@server Packages]# rpm -q vsftpd ftp telnet php
vsftpd-3.0.2-28.el7.x86_64
package ftp is not installed
telnet-0.17-65.el7.x86_64
package php is not installed
[root@server Packages]#
[root@server Packages]# rpm -ivh ftp-0.17-67.el7.x86_64.rpm
Preparing... ################################################ [100%]
Updating / installing...
1:ftp-0.17-67.el7 ################################################ [100%]
[root@server Packages]# rpm -ivh --nodeps php-
php-5.4.16-48.el7.x86_64.rpm
php-odbc-5.4.16-48.el7.x86_64.rpm
php-pdo-5.4.16-48.el7.x86_64.rpm
php-soap-5.4.16-48.el7.x86_64.rpm
php-common-5.4.16-48.el7.x86_64.rpm
php-pear-1.9.4-22.el7.noarch.rpm
php-xml-5.4.16-48.el7.x86_64.rpm
php-gd-5.4.16-48.el7.x86_64.rpm
php-pecl-memcache-3.0.8-4.el7.x86_64.rpm
php-psql-5.4.16-48.el7.x86_64.rpm
php-process-5.4.16-48.el7.x86_64.rpm
[root@server Packages]# rpm -ivh --nodeps php-5.4.16-48.el7.x86_64.rpm
Preparing... ################################################ [100%]
Updating / installing...
1:php-5.4.16-48.el7 ################################################ [100%]
[root@server Packages]#
```

Nmcli

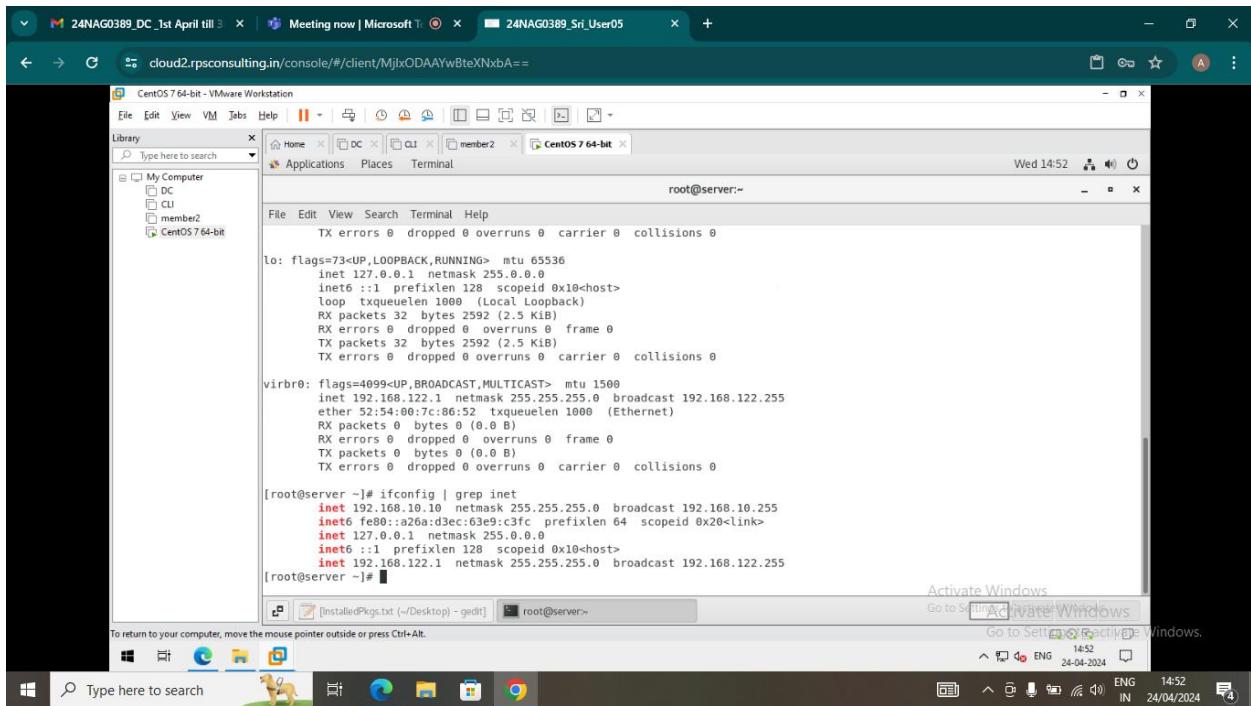


```
[root@server ~]# history | tail -6
392 nmcli -t device connect ens33
393 nmcli -p device show ens33
394 clear
395 nmcli | -6
396 nmcli | 6
397 history | tail -6
[root@server ~]#
```

Nmtui using manual entries of ip and dns



```
[root@server ~]# hostname
server
[root@server ~]# nmcli
[root@server ~]# systemctl restart network
[root@server ~]# ip add show ens33
2: ens33: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 00:0c:29:19:b3:55 brd ff:ff:ff:ff:ff:ff
    inet 192.168.10.10/24 brd 192.168.10.255 scope global noprefixroute ens33
        valid_lft forever preferred_lft forever
    inet6 fe80::a26a:d3ec:63e9:c3fc/64 scope link noprefixroute
        valid_lft forever preferred_lft forever
[root@server ~]#
```



```
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
lo: flags=73<UP,LOOPBACK,RUNNING> mtu 65536
    inet 127.0.0.1 netmask 255.0.0.0
    inetc ::1 prefixlen 128 scopeid 0x10<host>
    loop txqueuelen 1000  (Local Loopback)
    RX packets 32 bytes 2592 (2.5 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 32 bytes 2592 (2.5 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
virbr0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    inet 192.168.122.1 netmask 255.255.255.0 broadcast 192.168.122.255
        ether 52:54:00:07:86:52 txqueuelen 1000  (Ethernet)
    RX packets 0 bytes 0 (0.0 B)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 0 bytes 0 (0.0 B)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
[root@server ~]# ifconfig | grep inet
    inet 192.168.10.10 netmask 255.255.255.0 broadcast 192.168.10.255
        inetc fe80::a26a:d3ec:63e9:c3fc/64 scopeid 0x20<link>
    inet 127.0.0.1 netmask 255.0.0.0
        inetc ::1 prefixlen 128 scopeid 0x10<host>
    inet 192.168.122.1 netmask 255.255.255.0 broadcast 192.168.122.255
[root@server ~]#
```

Creating a temporary Alias

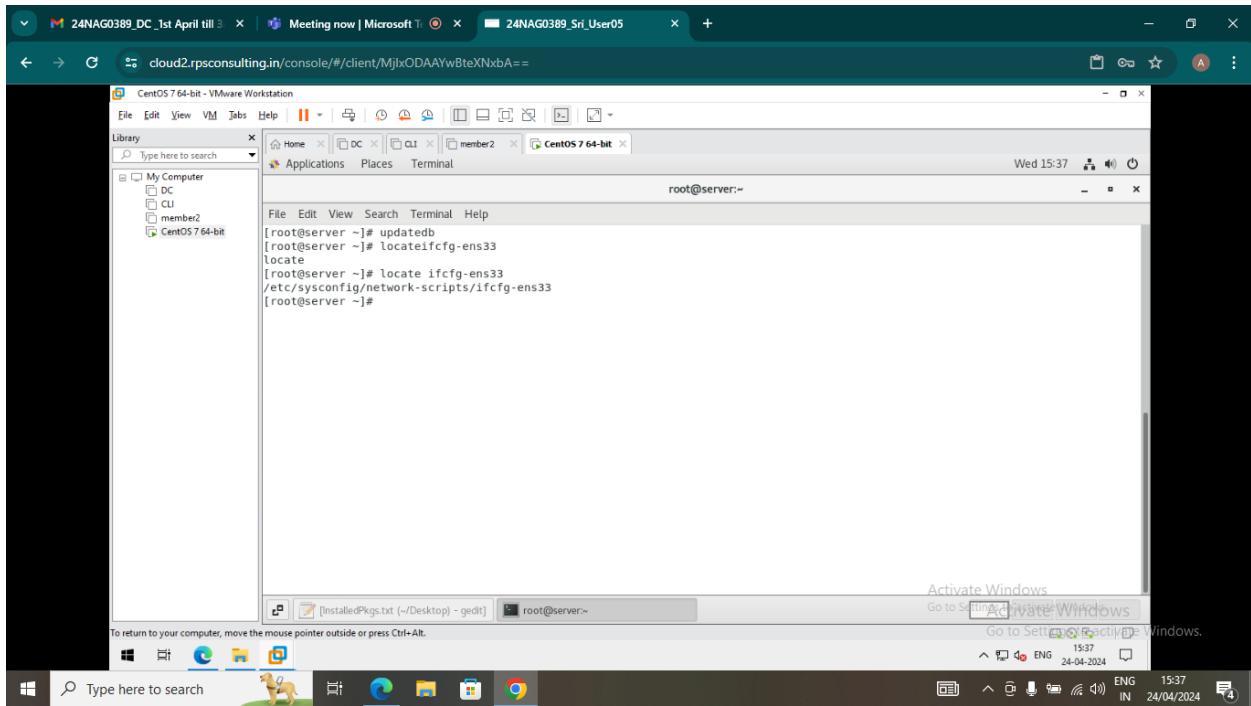
```
virbr0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    inet 192.168.122.1 netmask 255.255.255.0 broadcast 192.168.122.255
        ether 52:54:00:7c:86:52 txqueuelen 1000 (Ethernet)
        RX packets 0 bytes 0 (0.0 B)
        RX errors 0 dropped 0 overruns 0 frame 0
        TX packets 0 bytes 0 (0.0 B)
        TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0

[root@server ~]# ifconfig | grep inet
    inet 192.168.10.10 netmask 255.255.255.0 broadcast 192.168.10.255
    inet6 fe80::a26a:d3ec:63e9:c3fc prefixlen 64 scopeid 0x20<link>
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    inet 192.168.122.1 netmask 255.255.255.0 broadcast 192.168.122.255
[root@server ~]# alias myip="ifconfig | grep inet"
[root@server ~]# myip
    inet 192.168.10.10 netmask 255.255.255.0 broadcast 192.168.10.255
    inet6 fe80::a26a:d3ec:63e9:c3fc prefixlen 64 scopeid 0x20<link>
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    inet 192.168.122.1 netmask 255.255.255.0 broadcast 192.168.122.255
[root@server ~]# alias myip="ifconfig | grep inet | head -1"
[root@server ~]# myip
    inet 192.168.10.10 netmask 255.255.255.0 broadcast 192.168.10.255
[root@server ~]#
```

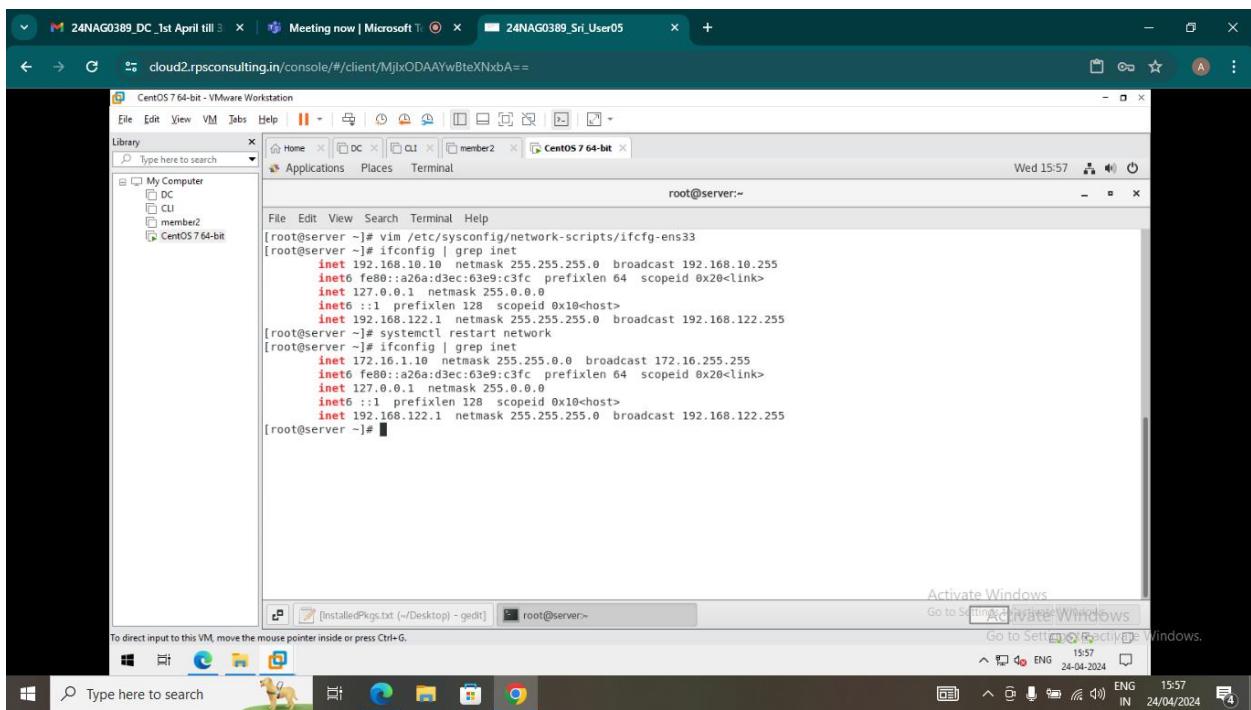
Finding a file

```
[root@server ~]# find / -name ifcfg-ens33
/etc/sysconfig/network-scripts/ifcfg-ens33
[root@server ~]# find / -name *.ens33
/etc/sysconfig/network-scripts/ifcfg-ens33
[root@server ~]#
```

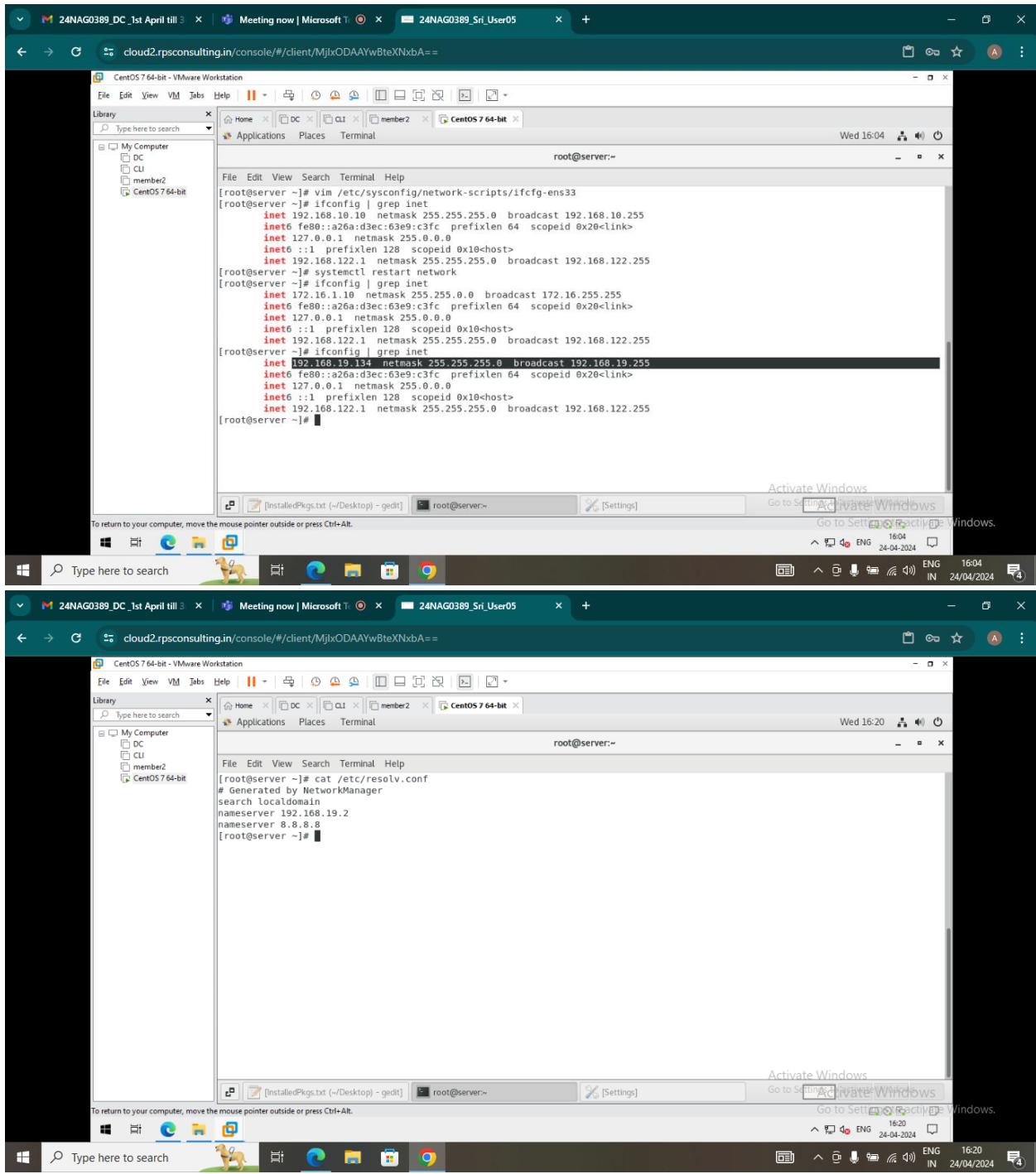
Locating a package



Listing the Ip address



Enabling automatic ipaddress



```
[root@server ~]# vim /etc/sysconfig/network-scripts/ifcfg-ens33
[root@server ~]# ifconfig | grep inet
    inet 192.168.10.10 netmask 255.255.255.0 broadcast 192.168.10.255
    inet6 fe80::a26a:d3ec:63e9:c3fc prefixlen 64 scopeid 0x20<link>
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    inet 192.168.122.1 netmask 255.255.255.0 broadcast 192.168.122.255
[root@server ~]# systemctl restart network
[root@server ~]# ifconfig | grep inet
    inet 172.16.1.10 netmask 255.255.0.0 broadcast 172.16.255.255
    inet6 fe80::a26a:d3ec:63e9:c3fc prefixlen 64 scopeid 0x20<link>
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    inet 192.168.122.1 netmask 255.255.255.0 broadcast 192.168.122.255
[root@server ~]# ifconfig | grep inet
    inet 192.168.19.134 netmask 255.255.255.0 broadcast 192.168.19.255
    inet6 fe80::a26a:d3ec:63e9:c3fc prefixlen 64 scopeid 0x20<link>
    inet 127.0.0.1 netmask 255.0.0.0
    inet6 ::1 prefixlen 128 scopeid 0x10<host>
    inet 192.168.122.1 netmask 255.255.255.0 broadcast 192.168.122.255
[root@server ~]#

```



```
[root@server ~]# cat /etc/resolv.conf
# Generated by NetworkManager
search localdomain
nameserver 192.168.19.2
nameserver 8.8.8.8
[root@server ~]#

```

Enabling httpd and checking the status of it.

```

[root@server ~]# systemctl enable httpd
Created symlink from /etc/systemd/system/multi-user.target.wants/httpd.service to /usr/lib/systemd/system/httpd.service.
[root@server ~]# systemctl start httpd
[root@server ~]# systemctl status httpd
● httpd.service - The Apache HTTP Server
   Loaded: loaded (/usr/lib/systemd/system/httpd.service; enabled; vendor preset: disabled)
     Active: active (running) since Wed 2024-04-24 16:31:28 IST; 15s ago
       Docs: man:httpd(8)
              man:apachectl(8)
    Main PID: 48148 (httpd)
      Status: "Total requests: 0; Current requests/sec: 0; Current traffic: 0 B/sec"
      Tasks: 8
     CGroup: /system.slice/httpd.service
             ├─48148 /usr/sbin/httpd -DFOREGROUND
             ├─48151 /usr/libexec/nss_pcache 4 off
             ├─48155 /usr/sbin/httpd -DFOREGROUND
             ├─48160 /usr/sbin/httpd -DFOREGROUND
             ├─48161 /usr/sbin/httpd -DFOREGROUND
             ├─48163 /usr/sbin/httpd -DFOREGROUND
             └─48166 /usr/sbin/httpd -DFOREGROUND

Apr 24 16:31:24 server systemd[1]: Starting The Apache HTTP Server...
Apr 24 16:31:26 server httpd[48148]: AH00558: httpd: Could not reliably determine the server's fully qualified domain ...message
Apr 24 16:31:28 server systemd[1]: Started The Apache HTTP Server.
Hint: Some lines were ellipsized. use -l to show in full.

[root@server ~]# service network restart
Restarting network (via systemctl):
[ OK ]

```

Displaying the information about total space and available space in a package

24NAG0389_DC_1st April till 3 | Meeting now | Microsoft Teams | 24NAG0389_Sri_User05

cloud2.rpsconsulting.in/console/#/client/MjlxODAAYWBeXNxba==

CentOS 7 64-bit - VMware Workstation

File Edit View VM Tabs Help

Library Type here to search

My Computer DC CLI member2 CentOS 7 64-bit

Applications Places Terminal

root@server:~

File Edit View Search Terminal Help

```
[root@server ~]# df -h
Filesystem      Size  Used Avail Use% Mounted on
/devtmpfs        1.9G   0    1.9G  0% /dev
tmpfs           1.9G   0    1.9G  0% /dev/shm
tmpfs           1.9G  13M   1.9G  1% /run
tmpfs           1.9G   0    1.9G  0% /sys/fs/cgroup
/dev/mapper/centos-root 320G  7.3G  256G  2% /
/dev/sdal1     1014M 187M  828M  19% /boot
tmpfs           378M  64K  378M  1% /run/user/0
/dev/sr0        4.4G  4.4G  0    100% /run/media/root/CentOS 7 x86_64
[root@server ~]# du -sh /*
0       /bin
154M    /boot
0       /day2
0       /dev
45M     /etc
132K    /home
0       /lib
0       /lib64
0       /media
0       /mnt
0       /opt
du: cannot access '/proc/49839/task/49839/fd/3': No such file or directory
du: cannot access '/proc/49839/task/49839/fdinfo/3': No such file or directory
du: cannot access '/proc/49839/fd/3': No such file or directory
```

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cloud2.rpsconsulting.in/console/#/client/MjlxODAAYWBeXNxba==

CentOS 7 64-bit - VMware Workstation

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Applications Places Terminal

root@server:~

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```
NAME      MAJ:MIN RM  SIZE RO TYPE MOUNTPOINT
sda          0:0    0    1.9G  0 disk 
└─sda1      0:1    0    16M  0 part /boot
sda2      0:2    0    356M  0 part 
├─centos-root 253:0  0 31.4G  0 lvm  /
├─centos-swap 253:1  0  3.6G  0 lvm  [SWAP]
sr0        11:0   1  4.4G  0 rom  /run/media/root/CentOS 7 x86_64
[root@server ~]# fdisk -l /dev/sda

Disk /dev/sda: 38.7 GB, 38654705664 bytes, 75497472 sectors
Units = sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disk label type: dos
Disk identifier: 0x000173aa

Device Boot Start End Blocks Id System
/dev/sdal *      2048 2099199 1048576 83 Linux
/dev/sda2  2099200 75497471 36699136 8e Linux LVM
[root@server ~]# history | tail -5
434 df -h
435 du -sh /*
436 lsblk
437 fdisk -l /dev/sda
438 history | tail -5
[root@server ~]#
```

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