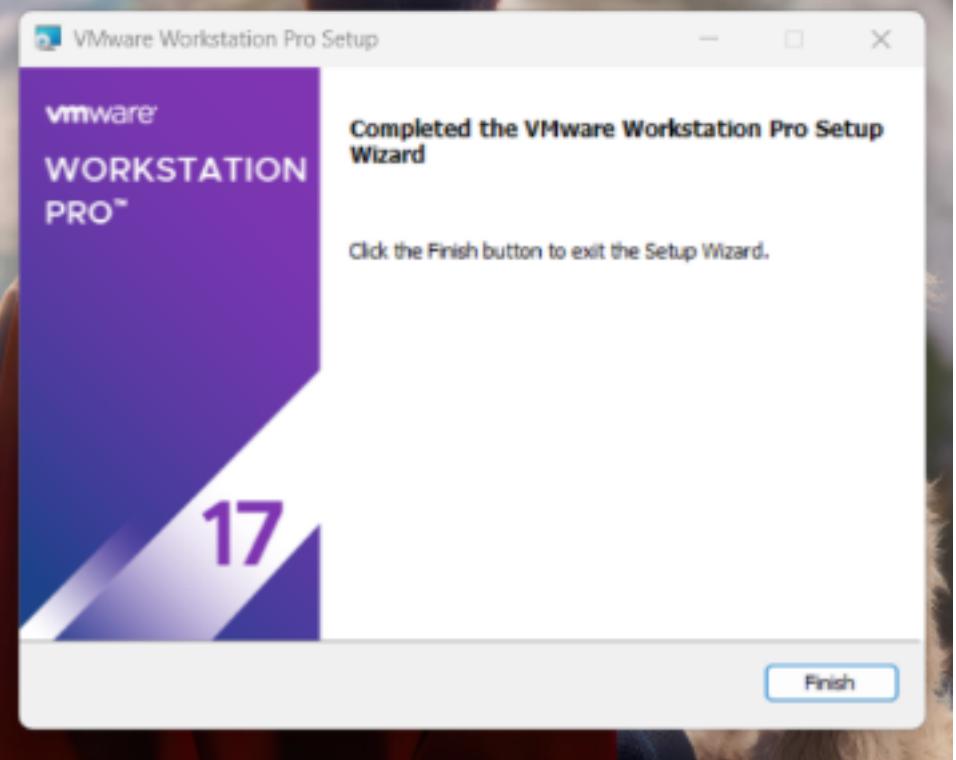
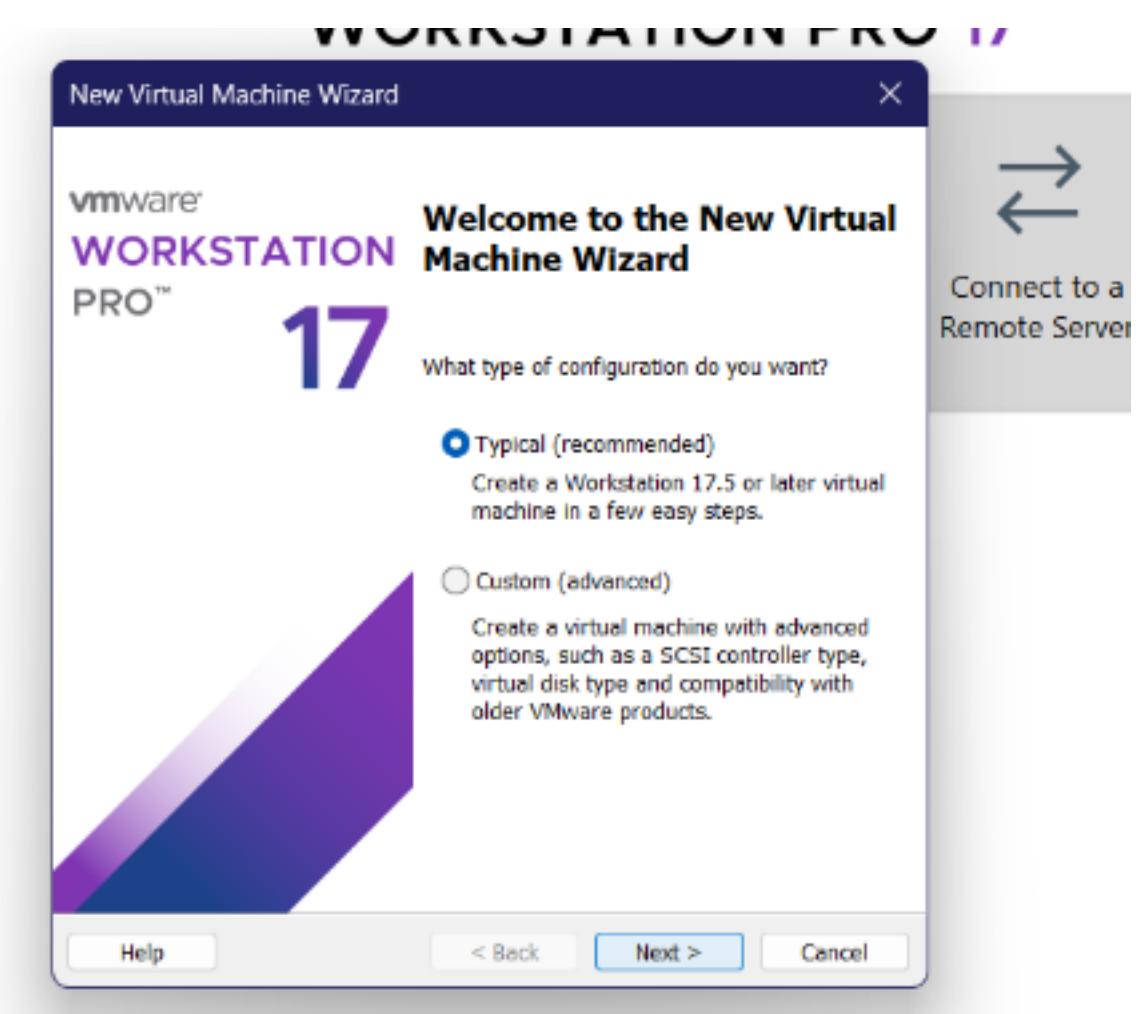


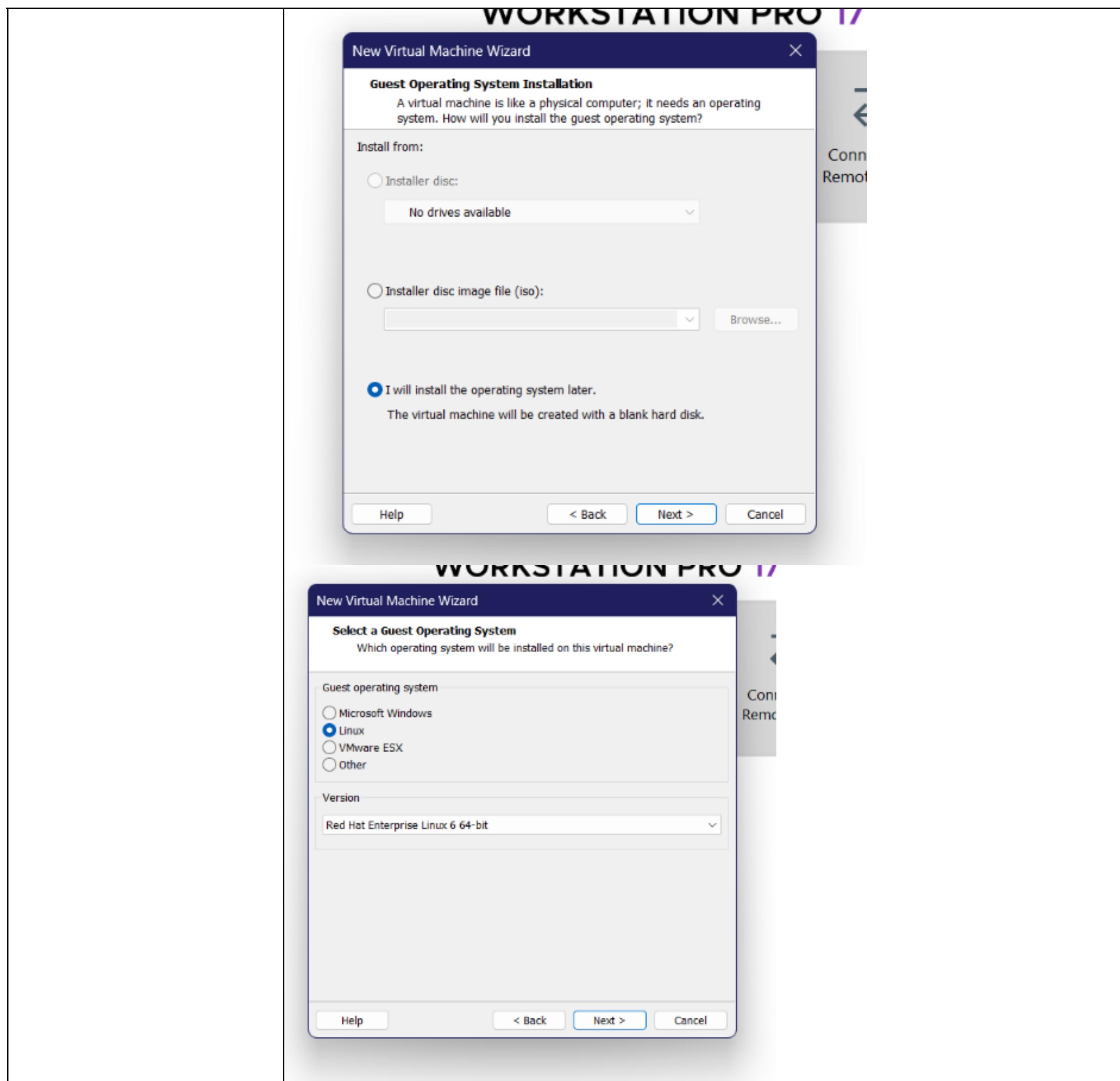
# K.E.T's V.G. VAZE COLLEGE

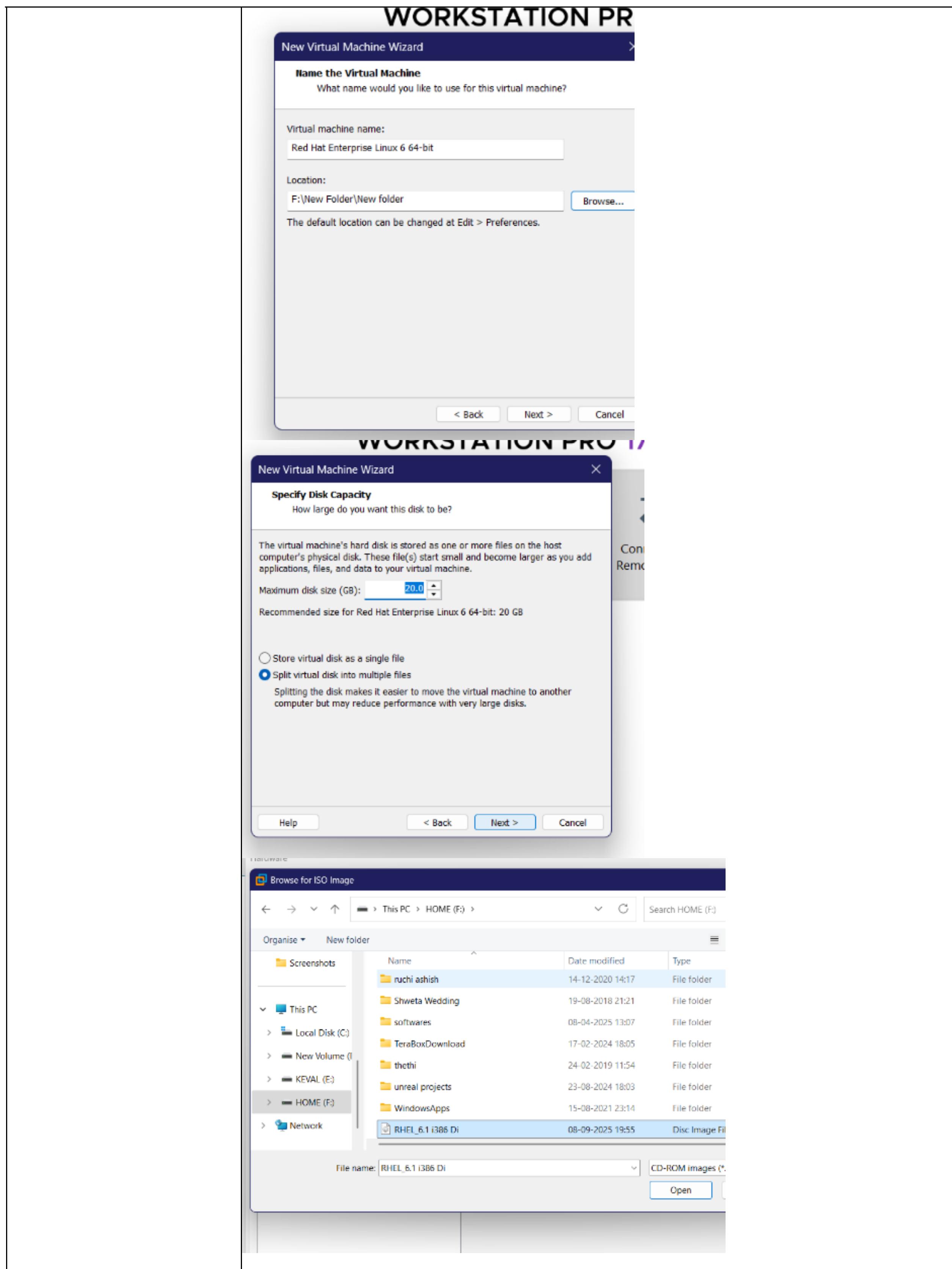
Roll: A051

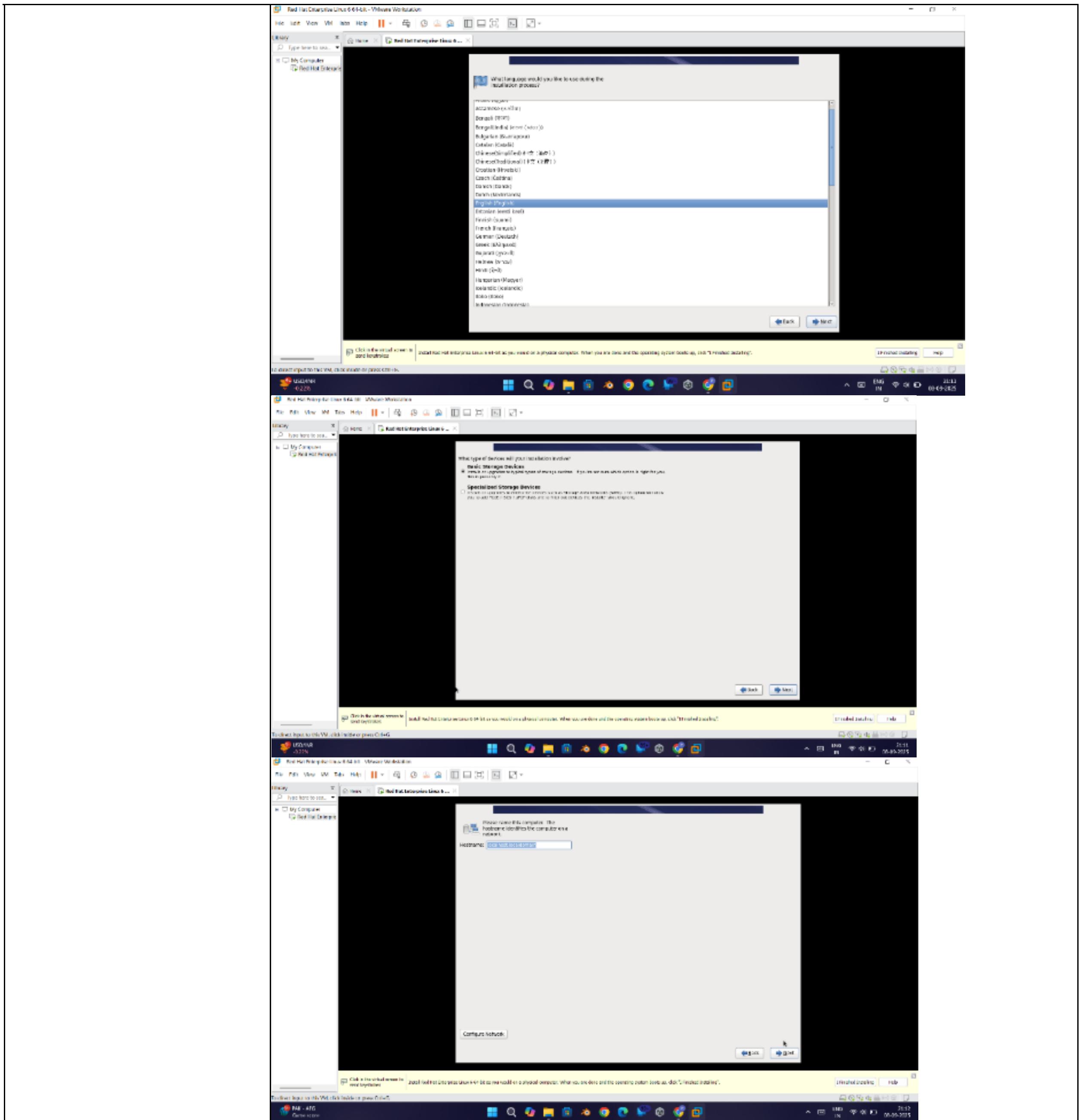
Name: Mrunali.S.Walekar

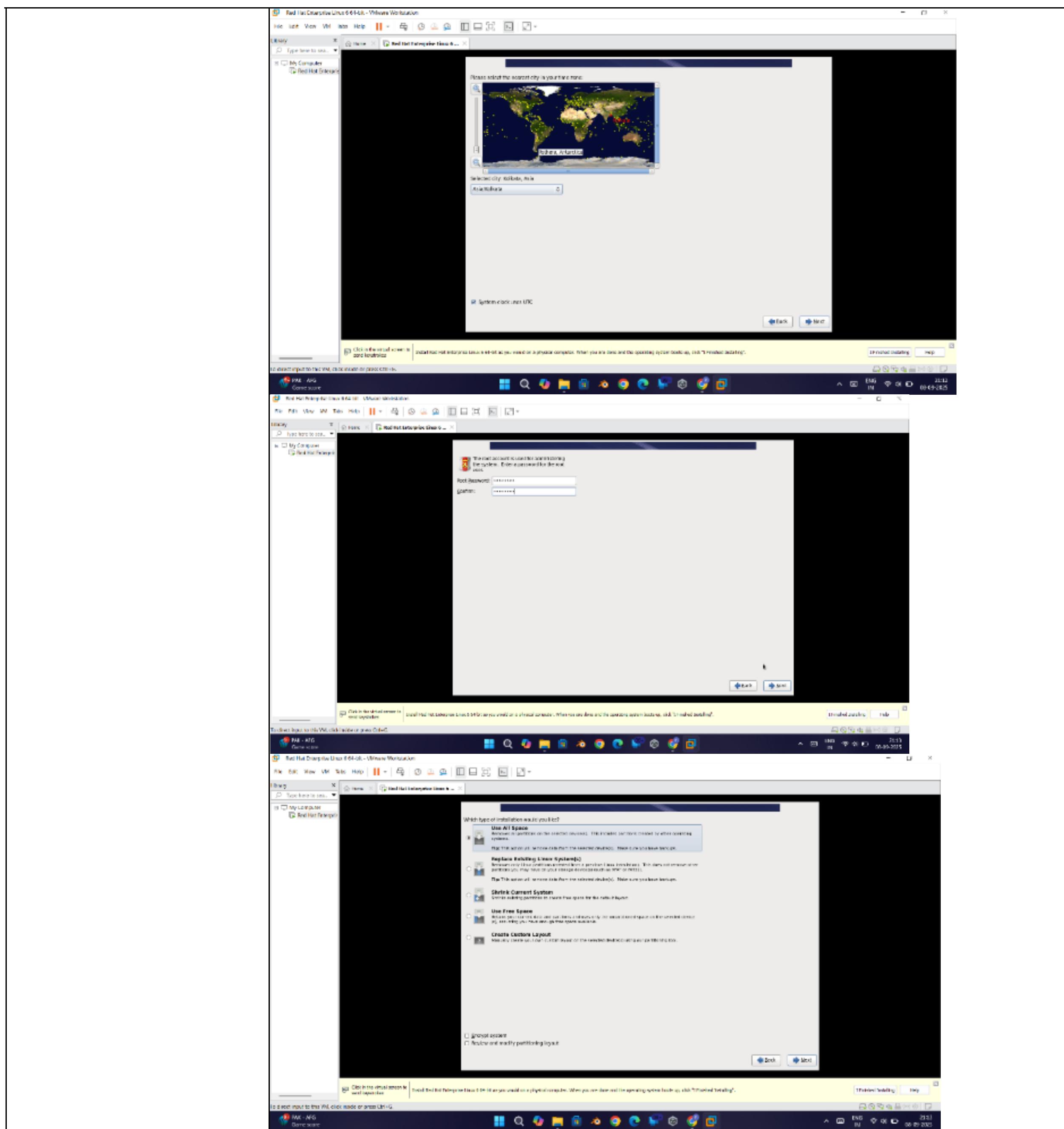
## Pactical 1

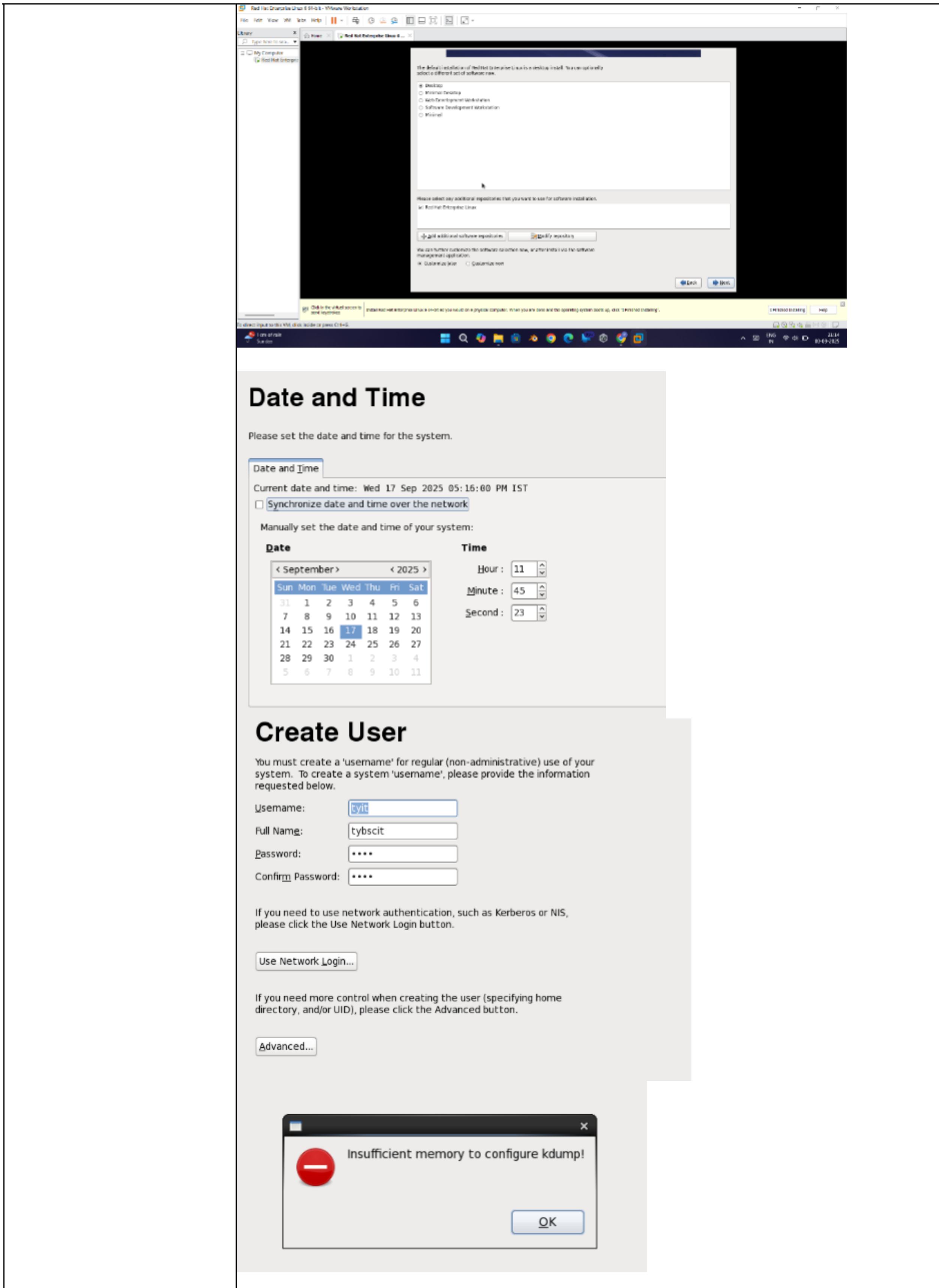
Practical 1	
1A	<p>Installation of RHEL 6.X</p>  









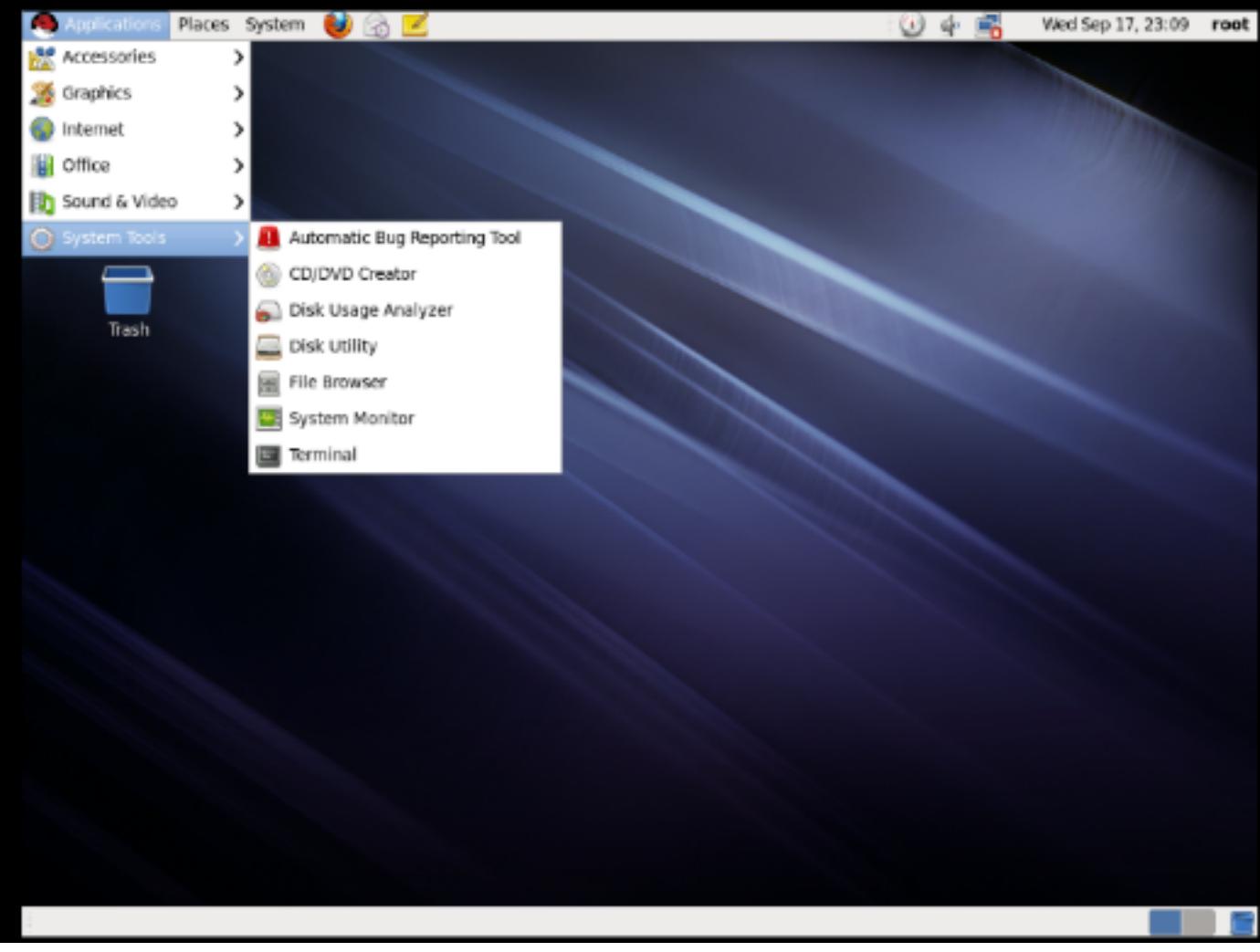


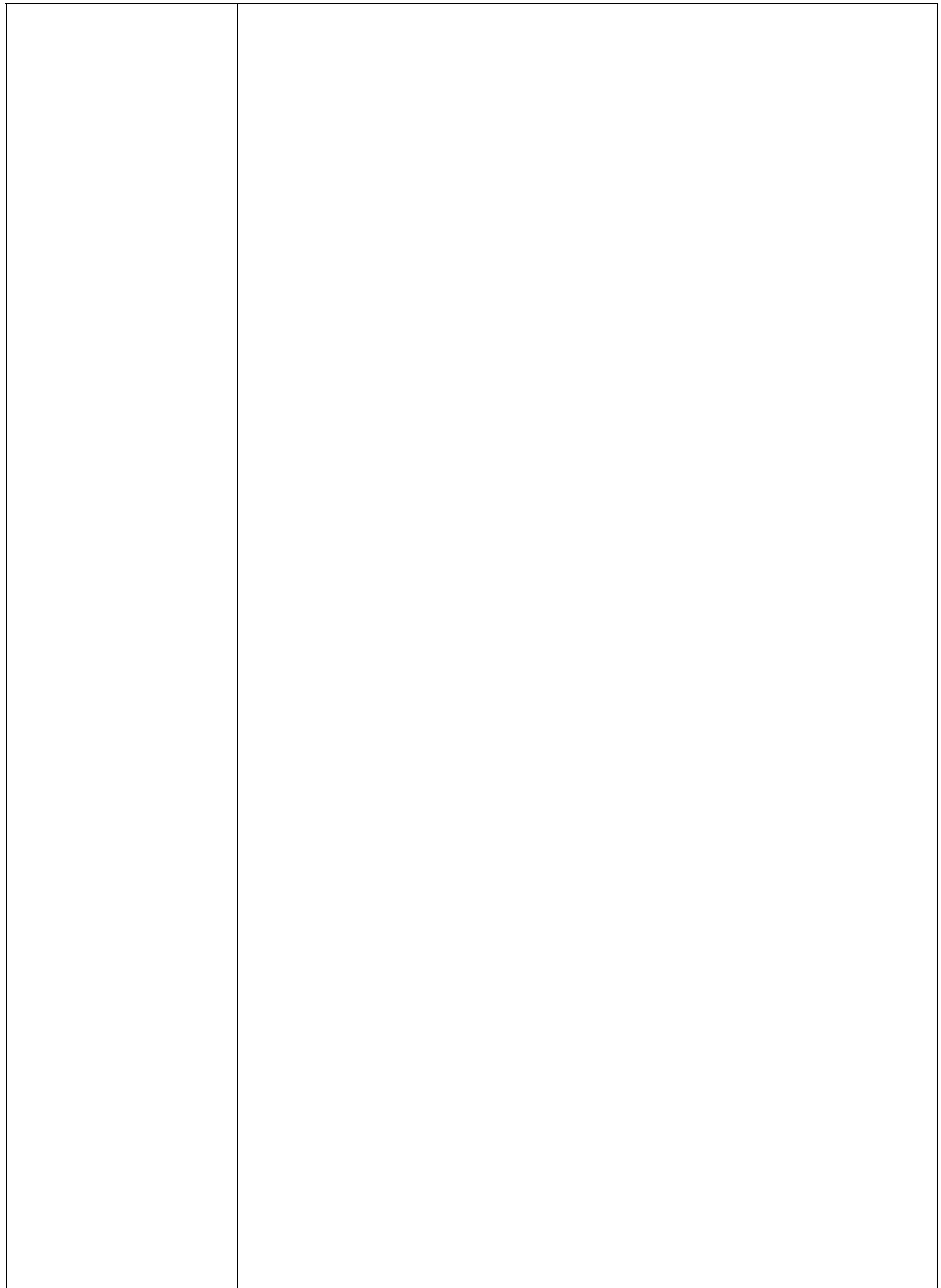
## K.E.T's V.G. VAZE COLLEGE

Roll: A051

Name: Mrunali.S.Walekar

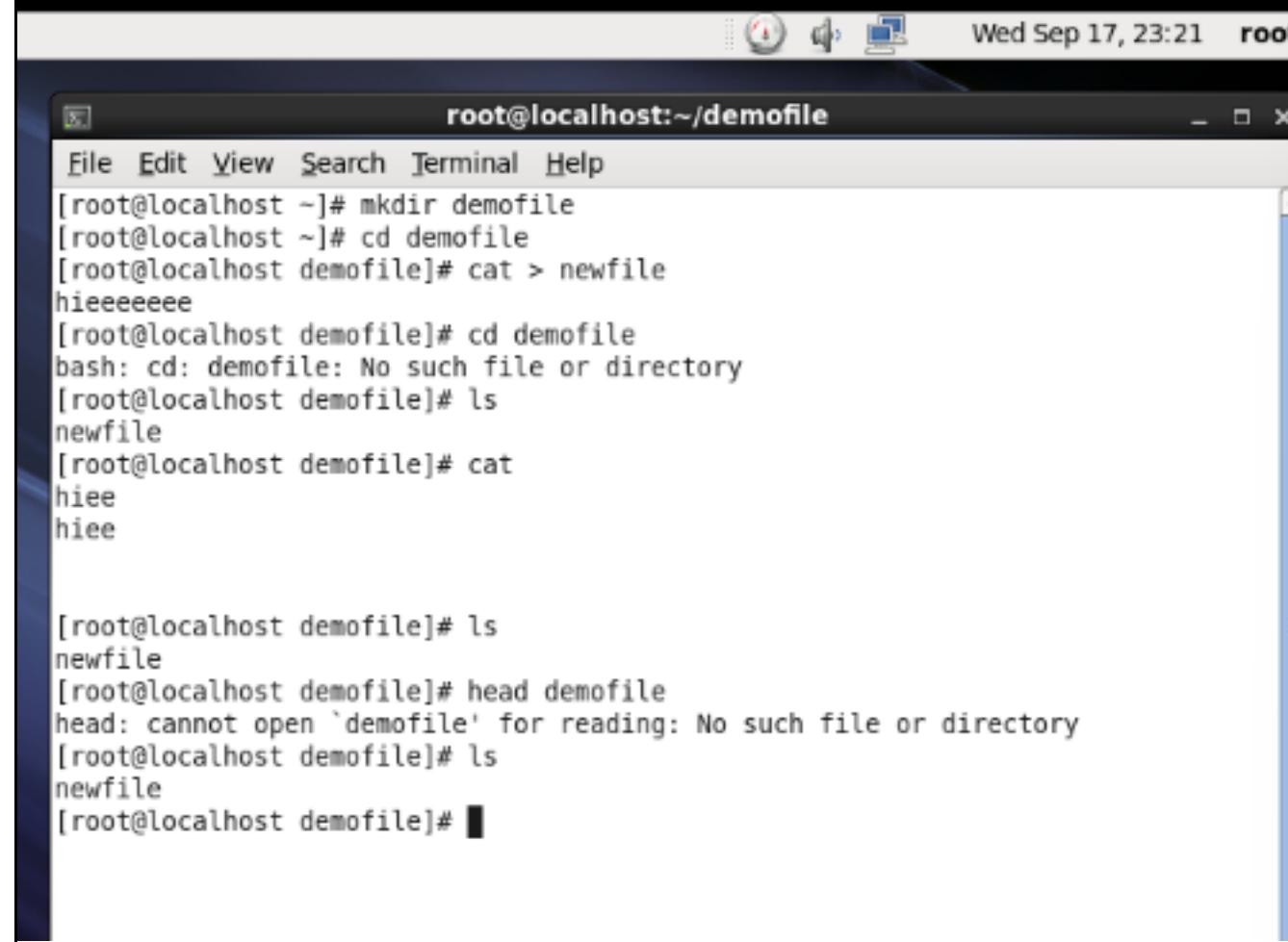
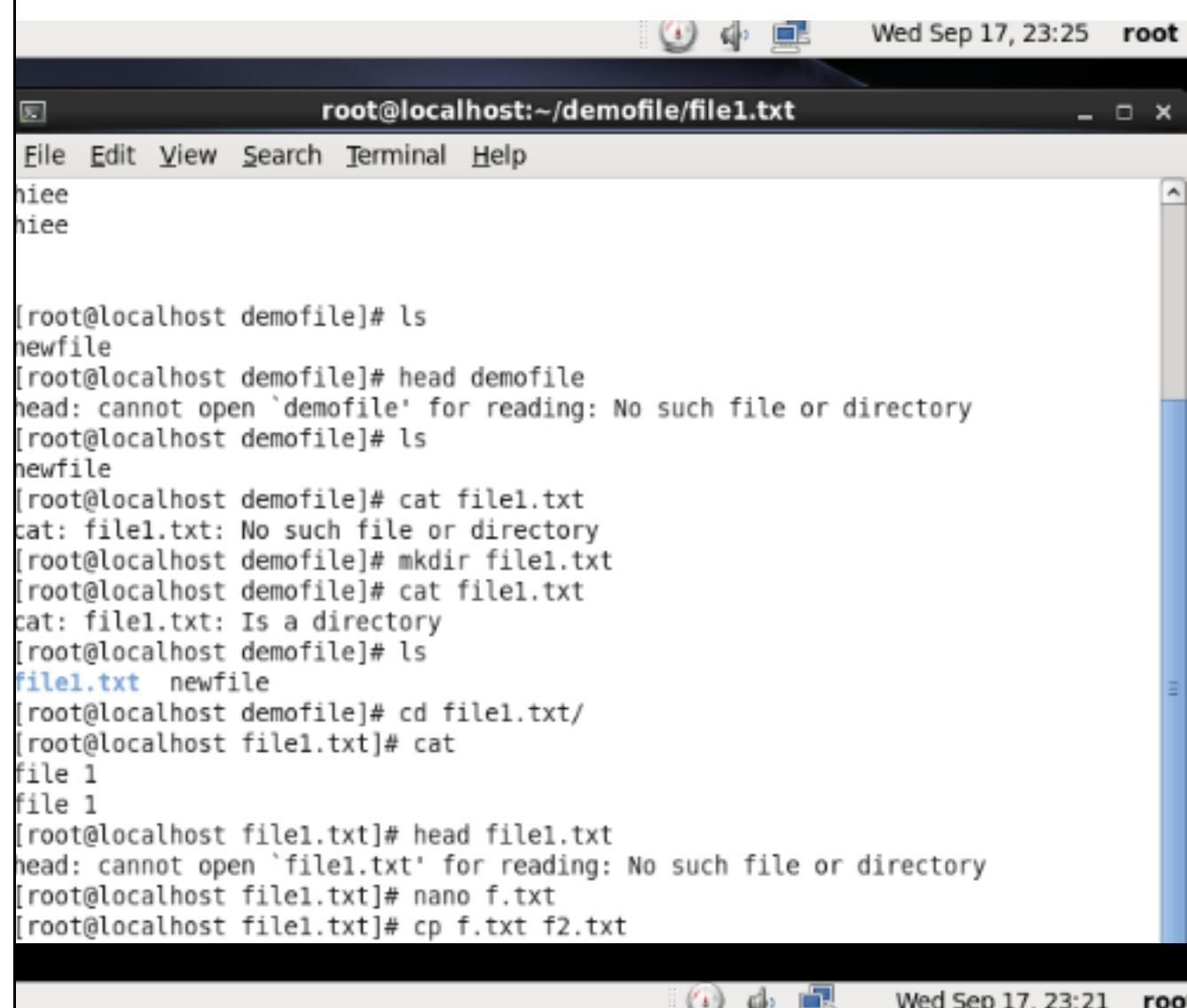
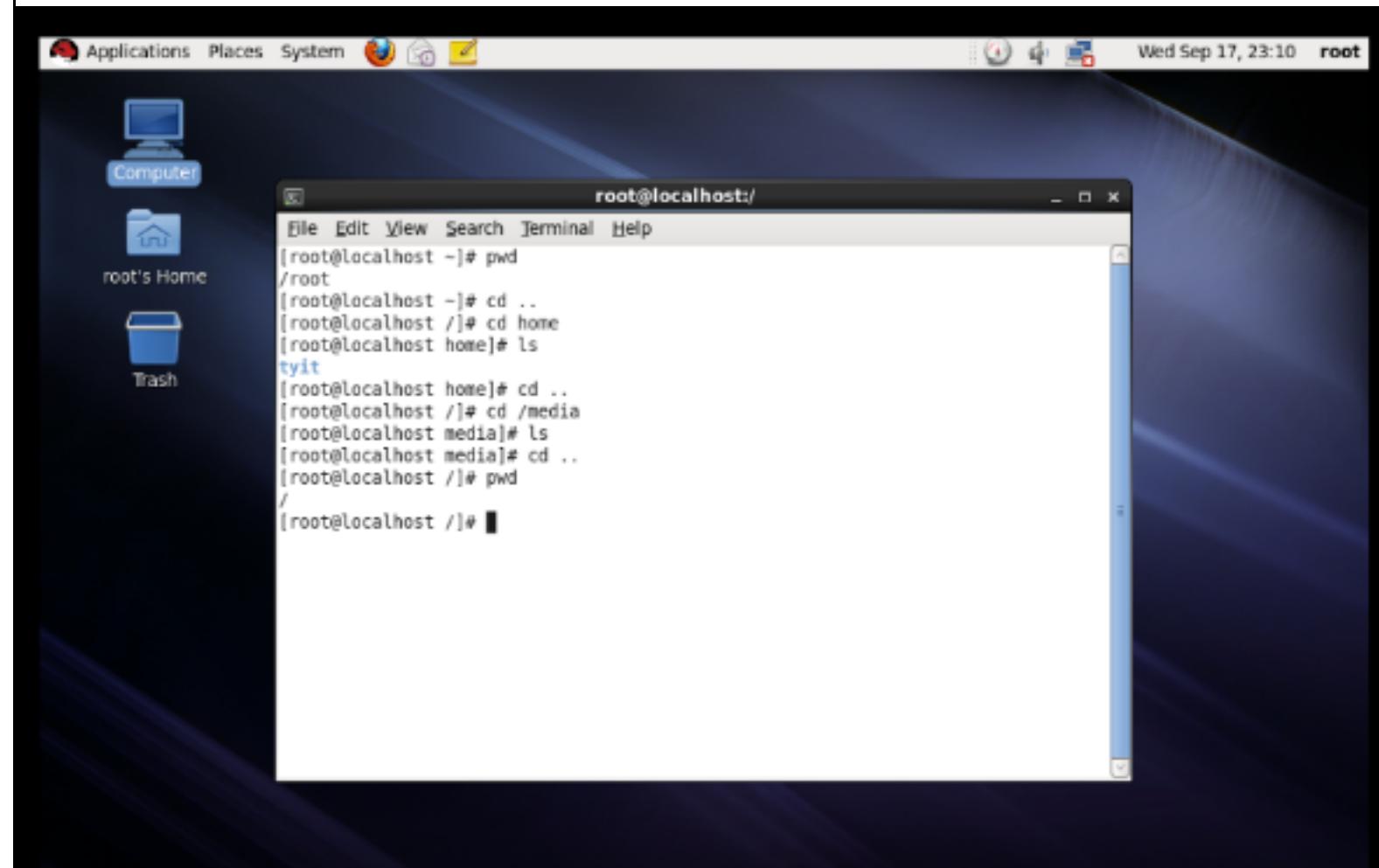
### Practical 2

Practical 2	Graphical User Interface and Command Line Interface and Processes.
2A	Exploring the Graphical Desktop 



2B

## The Command Line Interface



2C

## Managing Processes

The image consists of three vertically stacked screenshots of a Linux desktop environment, likely Kali Linux, demonstrating process management.

**Screenshot 1:** A terminal window titled "root@localhost:~/Desktop". The command entered is "[root@localhost Desktop]# ps aux | less". The output shows a list of processes, including Xorg, udisks-daemon, gnome-terminal, and various system daemons like ksoftirqd, watchdog, and cpuset.

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1756	root	20	0	158m	19m	8076	S	2.0	1.0	0:15.22	Xorg
2102	root	20	0	5532	732	532	S	0.3	0.0	0:02.37	udisks-daemon
26154	root	20	0	51660	11m	9436	S	0.3	0.6	0:00.19	gnome-terminal
1	root	20	0	2852	1416	1200	S	0.0	0.1	0:01.55	init
2	root	20	0	0	0	0	S	0.0	0.0	0:00.01	kthreadd
3	root	RT	0	0	0	0	S	0.0	0.0	0:00.00	migration/0
4	root	20	0	0	0	0	S	0.0	0.0	0:00.00	ksoftirqd/0
5	root	RT	0	0	0	0	S	0.0	0.0	0:00.00	migration/0
6	root	RT	0	0	0	0	S	0.0	0.0	0:00.00	watchdog/0
7	root	20	0	0	0	0	S	0.0	0.0	0:00.02	events/0
8	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuset
9	root	20	0	0	0	0	S	0.0	0.0	0:00.00	khelper
10	root	20	0	0	0	0	S	0.0	0.0	0:00.00	netns
11	root	20	0	0	0	0	S	0.0	0.0	0:00.00	async/mgr
12	root	20	0	0	0	0	S	0.0	0.0	0:00.00	pm
13	root	20	0	0	0	0	S	0.0	0.0	0:00.00	sync_supers
14	root	20	0	0	0	0	S	0.0	0.0	0:00.00	bdi-default

**Screenshot 2:** A terminal window titled "root@localhost:~/Desktop". The command entered is "top". The output shows a real-time view of system tasks and processes. The top section displays system statistics (Tasks: 173 total, 1 running, 172 sleeping, 0 stopped, 0 zombie), CPU usage (Cpu(s): 2.3%us, 0.0%sy, 0.0%ni, 97.7%id, 0.0%wa, 0.0%hi, 0.0%si, 0.0%st), memory usage (Mem: 2069764k total, 950676k used, 1119088k free, 72040k buffers), and swap usage (Swap: 4161528k total, 0k used, 4161528k free, 651692k cached). The bottom section is a table showing processes sorted by %CPU.

PID	USER	PR	NI	VIRT	RES	SHR	S	%CPU	%MEM	TIME+	COMMAND
1756	root	20	0	158m	19m	8076	S	2.0	1.0	0:15.22	Xorg
2102	root	20	0	5532	732	532	S	0.3	0.0	0:02.37	udisks-daemon
26154	root	20	0	51660	11m	9436	S	0.3	0.6	0:00.19	gnome-terminal
1	root	20	0	2852	1416	1200	S	0.0	0.1	0:01.55	init
2	root	20	0	0	0	0	S	0.0	0.0	0:00.01	kthreadd
3	root	RT	0	0	0	0	S	0.0	0.0	0:00.00	migration/0
4	root	20	0	0	0	0	S	0.0	0.0	0:00.00	ksoftirqd/0
5	root	RT	0	0	0	0	S	0.0	0.0	0:00.00	migration/0
6	root	RT	0	0	0	0	S	0.0	0.0	0:00.00	watchdog/0
7	root	20	0	0	0	0	S	0.0	0.0	0:00.02	events/0
8	root	20	0	0	0	0	S	0.0	0.0	0:00.00	cpuset
9	root	20	0	0	0	0	S	0.0	0.0	0:00.00	khelper
10	root	20	0	0	0	0	S	0.0	0.0	0:00.00	netns
11	root	20	0	0	0	0	S	0.0	0.0	0:00.00	async/mgr
12	root	20	0	0	0	0	S	0.0	0.0	0:00.00	pm
13	root	20	0	0	0	0	S	0.0	0.0	0:00.00	sync_supers
14	root	20	0	0	0	0	S	0.0	0.0	0:00.00	bdi-default

**Screenshot 3:** A terminal window titled "root@localhost:~/Desktop". The command entered is "ps aux". The output shows a list of processes, similar to the first screenshot but without the "less" pager.

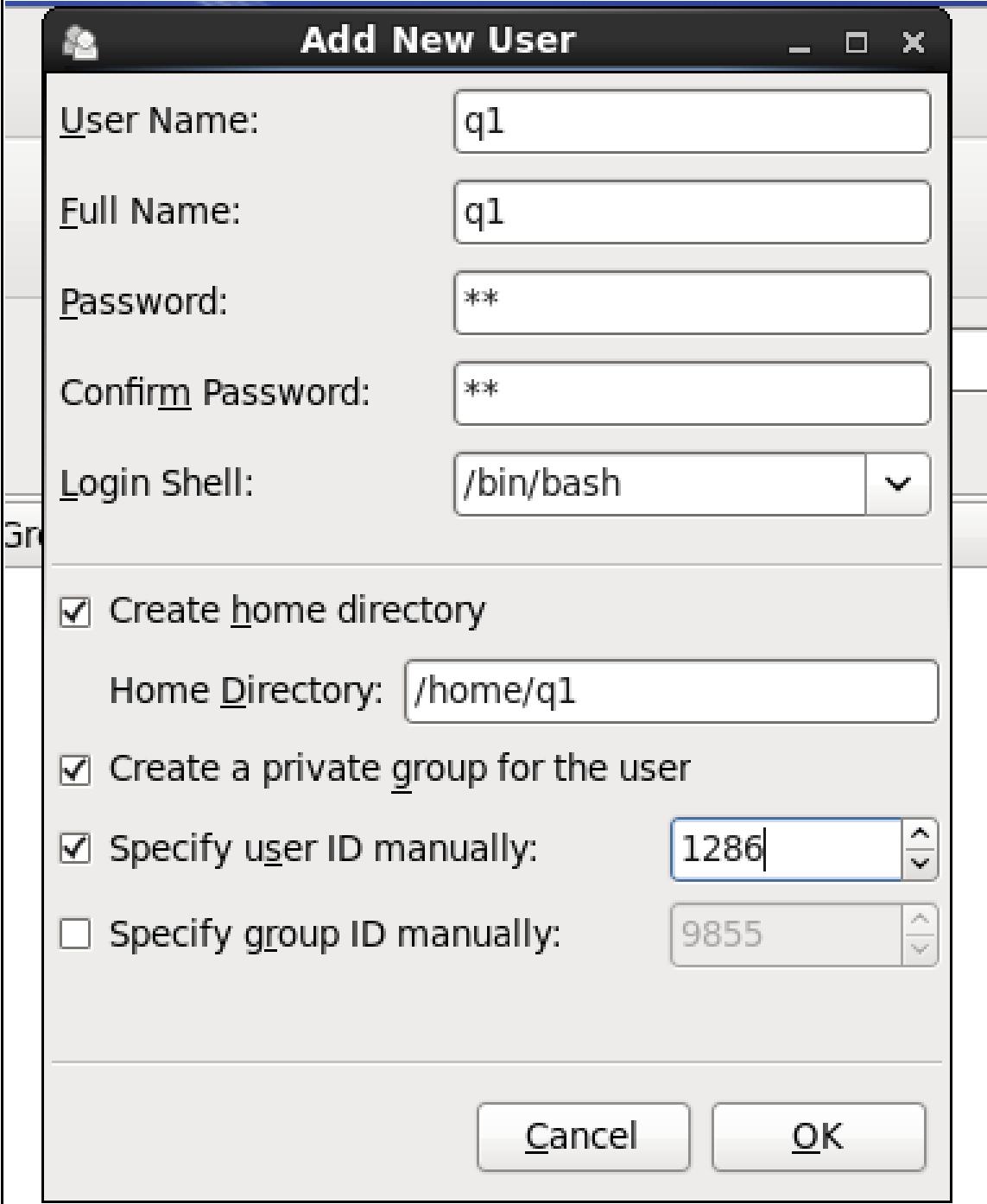
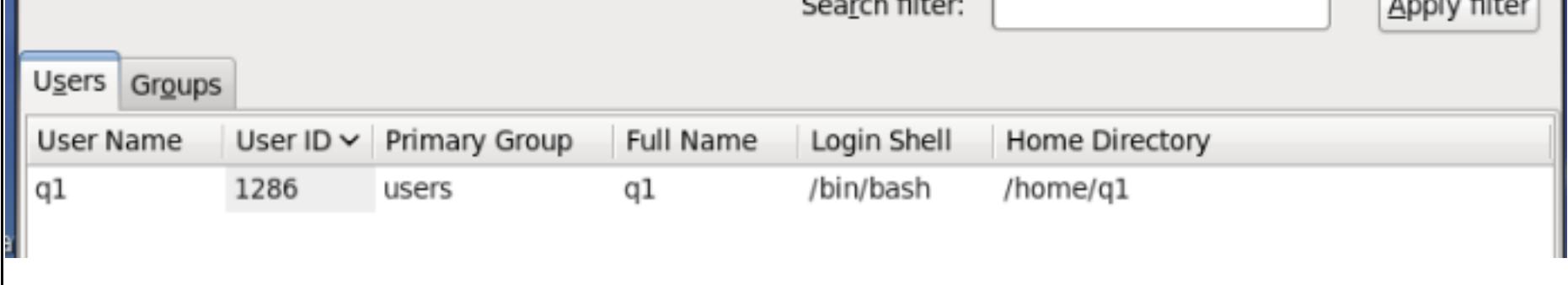
USER	PID	%CPU	%MEM	VSZ	RSS	TTY	STAT	START	TIME	COMMAND
root	1	0.0	0.0	2852	1416	?	Ss	22:30	0:01	/sbin/init
root	2	0.0	0.0	0	0	?	S	22:30	0:00	[kthreadd]
root	3	0.0	0.0	0	0	?	S	22:30	0:00	[migration/0]
root	4	0.0	0.0	0	0	?	S	22:30	0:00	[ksoftirqd/0]
root	5	0.0	0.0	0	0	?	S	22:30	0:00	[migration/0]
root	6	0.0	0.0	0	0	?	S	22:30	0:00	[watchdog/0]
root	7	0.0	0.0	0	0	?	S	22:30	0:00	[events/0]
root	8	0.0	0.0	0	0	?	S	22:30	0:00	[cpuset]
root	9	0.0	0.0	0	0	?	S	22:30	0:00	[khelper]
root	10	0.0	0.0	0	0	?	S	22:30	0:00	[netns]
root	11	0.0	0.0	0	0	?	S	22:30	0:00	[async/mgr]
root	12	0.0	0.0	0	0	?	S	22:30	0:00	[pm]
root	13	0.0	0.0	0	0	?	S	22:30	0:00	[sync_supers]
root	14	0.0	0.0	0	0	?	S	22:30	0:00	[bdi-default]
root	15	0.0	0.0	0	0	?	S	22:30	0:00	[integrityd/0]
root	16	0.0	0.0	0	0	?	S	22:30	0:00	[kblockd/0]
root	17	0.0	0.0	0	0	?	S	22:30	0:00	[kacpid]
root	18	0.0	0.0	0	0	?	S	22:30	0:00	[kacpi_notify]
root	19	0.0	0.0	0	0	?	S	22:30	0:00	[kacpi_hotplug]
root	20	0.0	0.0	0	0	?	S	22:30	0:00	[ata/0]
root	21	0.0	0.0	0	0	?	S	22:30	0:00	[ata_aux]
root	22	0.0	0.0	0	0	?	S	22:30	0:00	[ksuspend_usbd]

## K.E.T's V.G. VAZE COLLEGE

Roll: A051

Name: Mrunali.S.Walekar

### Practical 3

Practical 3	Working with Users, Groups, and Permissions
3A	<p>Users &amp; Groups :</p> <p>1) create a user information with a home directory and a user id 1286</p>  

2) create a user tech with a user id 9846 and group id 1689

The screenshot shows the 'Add New User' dialog box and a 'Users' table.

**Add New User Dialog:**

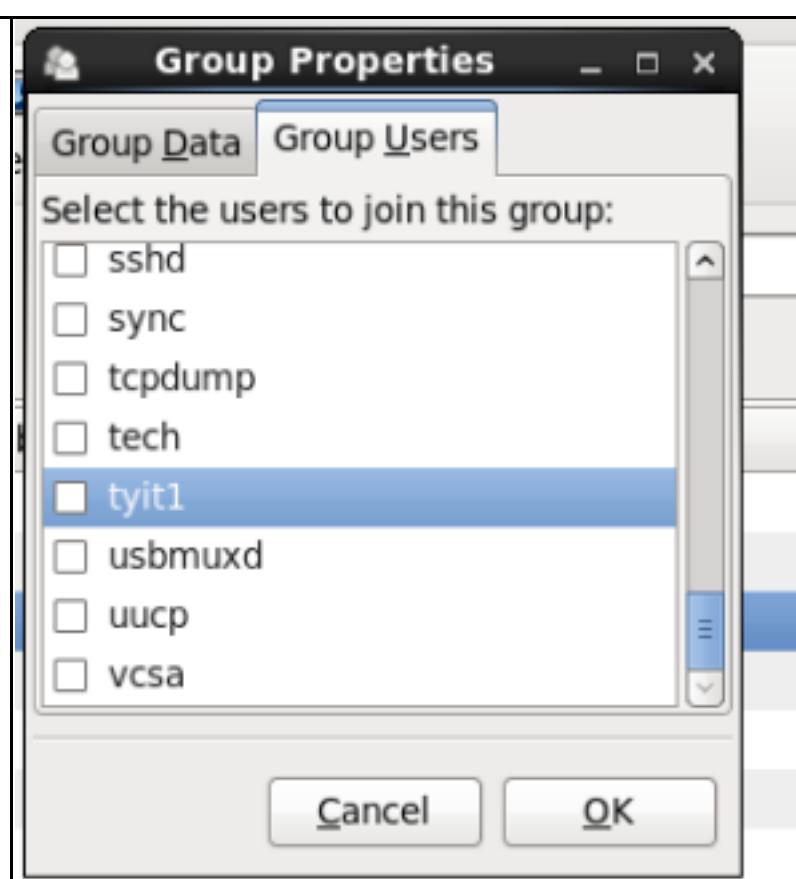
- User Name: tech
- Full Name: tech
- Password: \*\*\*\*
- Confirm Password: \*\*\*\*
- Login Shell: /bin/bash
- Create home directory  
Home Directory: /home/tech
- Create a private group for the user
- Specify user ID manually: 9846
- Specify group ID manually: 1689

**Users Table:**

User Name	User ID	Primary Group	Full Name	Login Shell	Home Directory
q1	1286	users	q1	/bin/bash	/home/q1
tech	9846	tech	tech	/bin/bash	/home/tech

3) remove tyit1 user from project group

project	1690	tyit1
tyit1	9847	tyit1



project	1690
tyit1	9847

4)add username tyit using user add command

The terminal window shows the command [root@server Desktop]# useradd tyit being run, followed by a prompt [root@server Desktop]#.

The screenshot also shows a user management interface with tabs for 'Users' and 'Groups'. The 'Users' table lists four users:

User Name	User ID	Primary Group	Full Name	Login Shell	Home Directory
q1	1286	users	q1	/bin/bash	/home/q1
tech	9846	tech	tech	/bin/bash	/home/tech
tyit1	9847	tyit1	tyit1	/bin/bash	/home/tyit1
tyit	9848	tyit		/bin/bash	/home/tyit

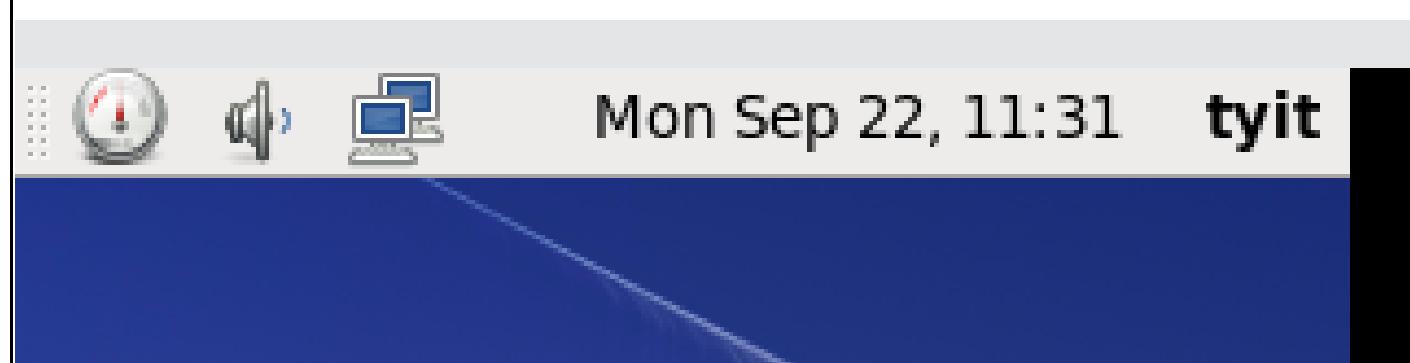
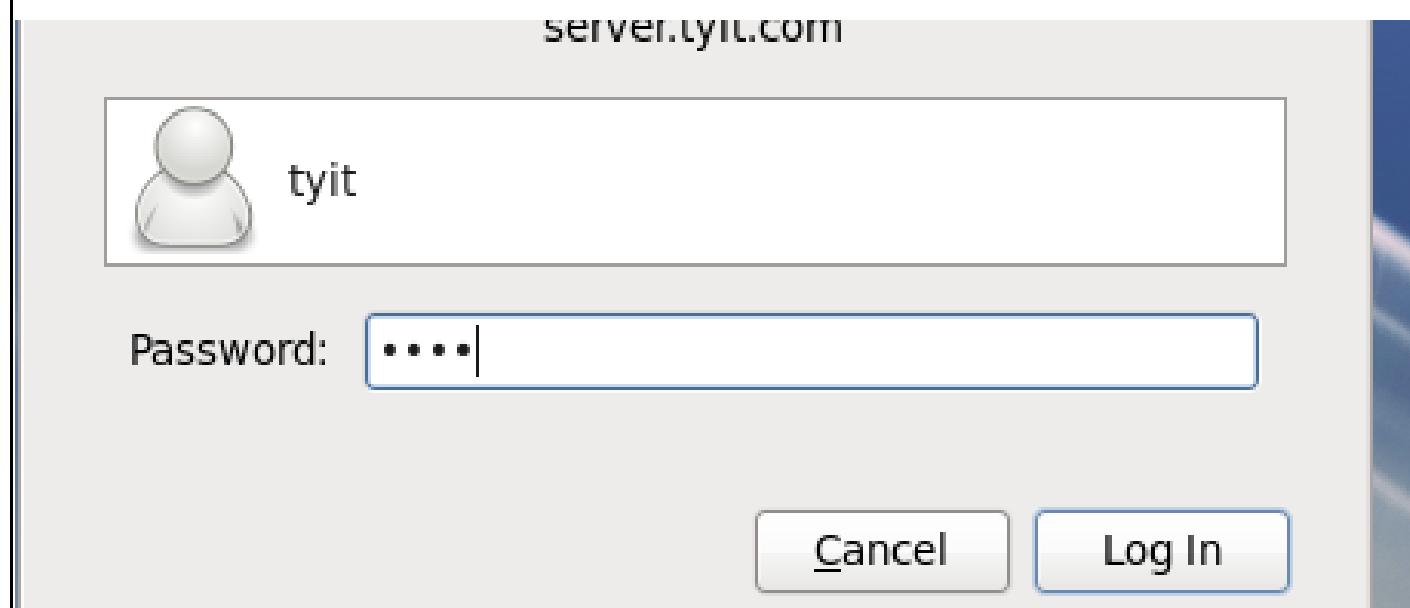
Create a password using passwd command

The terminal window shows the command [root@server Desktop]# passwd tyit being run, followed by a prompt [root@server Desktop]#.

The output of the passwd command shows the password creation process:

```
Changing password for user tyit.  
New password:  
BAD PASSWORD: it is too short  
BAD PASSWORD: is too simple  
Retype new password:  
passwd: all authentication tokens updated successfully.
```

Login using this user



5) examine home directory of each user

```
root@server:~$ File Edit View Search Terminal Help
[root@server Desktop]# cd /
[root@server /]# cd home
[root@server home]# ls
m1 q1 s s2 serverfile tech tyit tyit1
[root@server home]#
```

6)examine /etc/shadow

/etc/group

/etc/passwd

With respect to new addition

7)Create 2 groups manager and staff add user to the group

8)login using root account with del command.

9)delete any tow users using various options of userdel command

Permissions:

created a main directory

create 7 subdirectories and 2 files in the main directory

change permissions.

Wed Sep 17, 9:50 AM root

```
[root@server ~]# chmod
chmod: missing operand
Try 'chmod --help' for more information.
[root@server ~]# mkdir maindt
[root@server ~]# cd maindt
[root@server maindt]# mkdir one
[root@server maindt]# mkdir two
[root@server maindt]# mkdir three
[root@server maindt]# mkdir four
[root@server maindt]# mkdir five
[root@server maindt]# mkdir six
[root@server maindt]# mkdir seven
[root@server maindt]# md --help
bash: md: command not found
[root@server maindt]# rd
bash: rd: command not found
[root@server maindt]# touch f1.txt
[root@server maindt]# cat f1.txt
[root@server maindt]# cat > f1.txt
this is file 1.
[root@server maindt]# touch f2.txt
[root@server maindt]# cat > f2.txt
this is file 2.
^E[root@server maindt]#
```

mouse movement, video and performance. Log in to the guest operating system and click

Install Tools Remind Me Later Never Remind Me

9:52 AM 9/17/2025

Wed Sep 17, 9:58 AM root

```
[root@server maindt]# touch f1.txt
[root@server maindt]# cat f1.txt
[root@server maindt]# cat > f1.txt
this is file 1.
[root@server maindt]# touch f2.txt
[root@server maindt]# cat > f2.txt
this is file 2.
^E[root@server maindt]# cd one
[root@server one]# chmod 755 one
chmod: cannot access `one': No such file or directory
[root@server one]# cd ..
[root@server maindt]# chmod 755 one
[root@server maindt]# ls -l
total 36
-rw-r--r--. 1 root root 17 Sep 17 09:58 f1.txt
-rw-r--r--. 1 root root 17 Sep 17 09:58 f2.txt
drwxr-xr-x. 2 root root 4096 Sep 17 09:47 five
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 four
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 one
drwxr-xr-x. 2 root root 4096 Sep 17 09:47 seven
drwxr-xr-x. 2 root root 4096 Sep 17 09:47 six
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 three
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 two
[root@server maindt]#
```

mouse movement, video and performance. Log in to the guest operating system and click

Install Tools Remind Me Later Never Remind Me

10:00 AM 9/17/2025

```
Wed Sep 17, 9:59 AM root
root@server:~/maindt
File Edit View Search Terminal Help
[root@server maindt]# ls -l
total 36
-rw-r--r--. 1 root root 17 Sep 17 09:50 f1.txt
-rw-r--r--. 1 root root 17 Sep 17 09:50 f2.txt
drwxr-xr-x. 2 root root 4096 Sep 17 09:47 five
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 four
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 one
drwxr-xr-x. 2 root root 4096 Sep 17 09:47 seven
drwxr-xr-x. 2 root root 4096 Sep 17 09:47 six
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 three
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 two
[root@server maindt]# chmod 777 two
[root@server maindt]# ls -l
total 36
-rw-r--r--. 1 root root 17 Sep 17 09:50 f1.txt
-rw-r--r--. 1 root root 17 Sep 17 09:50 f2.txt
drwxr-xr-x. 2 root root 4096 Sep 17 09:47 five
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 four
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 one
drwxr-xr-x. 2 root root 4096 Sep 17 09:47 seven
drwxr-xr-x. 2 root root 4096 Sep 17 09:47 six
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 three
drwxrwxrwx. 2 root root 4096 Sep 17 09:46 two
[root@server maindt]# 

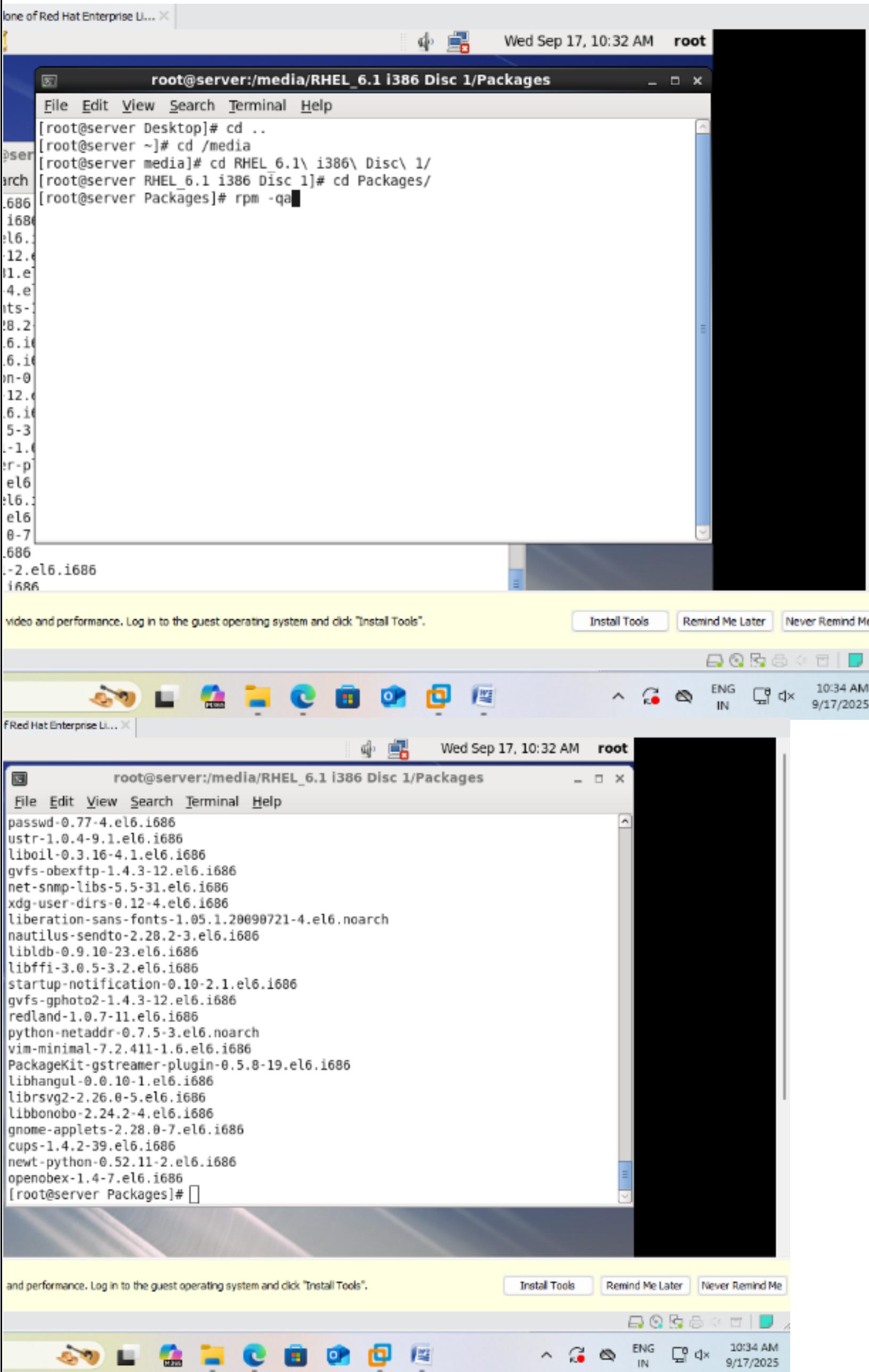
e movement, video and performance. Log in to the guest operating system and click
Install Tools Remind Me Later Never Remind Me

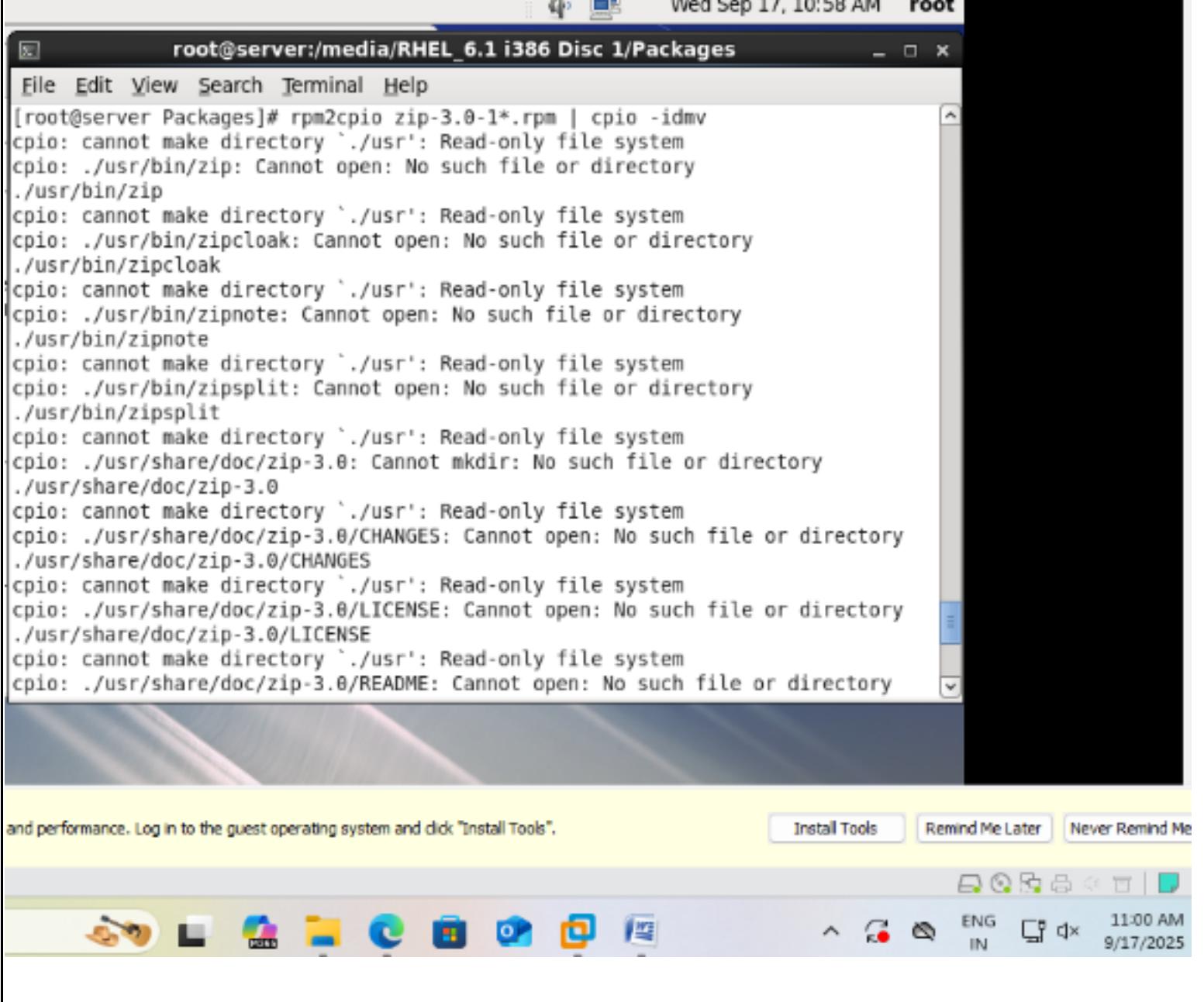
drwxrwxrwx. 2 root root 4096 Sep 17 09:46 two
[root@server maindt]# chmod 777 f1.txt
[root@server maindt]# ls -l
total 36
-rwxrwxrwx. 1 root root 17 Sep 17 09:50 f1.txt
-rw-r--r--. 1 root root 17 Sep 17 09:50 f2.txt
drwxr-xr-x. 2 root root 4096 Sep 17 09:47 five
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 four
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 one
drwxr-xr-x. 2 root root 4096 Sep 17 09:47 seven
drwxr-xr-x. 2 root root 4096 Sep 17 09:47 six
drwxr-xr-x. 2 root root 4096 Sep 17 09:46 three
drwxrwxrwx. 2 root root 4096 Sep 17 09:46 two
[root@server maindt]# 
```

Roll: A051

Name: Mrunali.S.Walekar

## Pactical 4

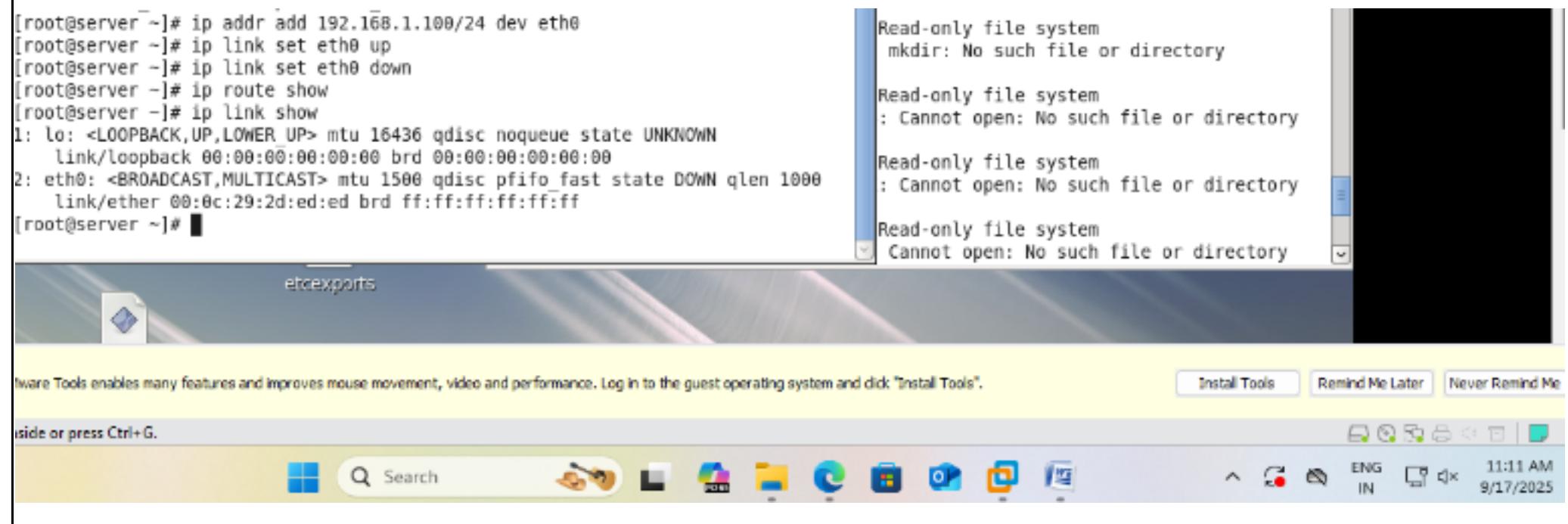
Practical 4	Working with RPM Storage and Networking
4A	<p>Using Query Options</p>  <p>The screenshot displays two terminal windows side-by-side, both running on a Red Hat Enterprise Linux 6.1 i386 Disc 1/Packages system. The top window shows the initial command being run: [root@server Packages]# rpm -qa. The bottom window shows the full output of the command, listing numerous packages installed on the system. Both terminals show the same command-line interface with a menu bar (File, Edit, View, Search, Terminal, Help) and a status bar indicating the date and time (Wed Sep 17, 10:32 AM) and user (root). The desktop environment at the bottom of the screen includes icons for Home, Mail, Files, Internet, Applications, and Help, along with system status indicators like battery level, signal strength, and language settings.</p> <pre>[root@server Desktop]# cd .. [root@server ~]# cd /media [root@server media]# cd RHEL_6.1\ i386\ Disc\ 1/ [root@server RHEL_6.1 i386 Disc 1]# cd Packages/ [root@server Packages]# rpm -qa  passwd-0.77-4.el6.1686 ustr-1.0.4-9.1.el6.1686 liboil-0.3.16-4.1.el6.1686 gvfs-obexftp-1.4.3-12.el6.1686 net-snmp-libs-5.5-31.el6.1686 xdg-user-dirs-0.12-4.el6.1686 liberation-sans-fonts-1.05.1.20090721-4.el6.noarch nautilus-sendto-2.28.2-3.el6.1686 libldb-0.9.10-23.el6.1686 libffi-3.0.5-3.el6.1686 startup-notification-0.10-2.1.el6.1686 gvfs-gphoto2-1.4.3-12.el6.1686 redland-1.0.7-11.el6.1686 python-netaddr-0.7.5-3.el6.noarch vim-minimal-7.2.411-1.6.el6.1686 PackageKit-gstreamer-plugin-0.5.8-19.el6.1686 libhangul-0.0.10-1.el6.1686 librsvg2-2.26.0-5.el6.1686 libbonobo-2.24.2-4.el6.1686 gnome-applets-2.28.0-7.el6.1686 cups-1.4.2-39.el6.1686 newt-python-0.52.11-2.el6.1686 openobex-1.4-7.el6.1686 [root@server Packages]#</pre>

4B Extracting Files From RPMs	<pre>[root@server Packages]# rpm -qa   grep zip bzip2-1.0.5-7.el6_0.i686 unzip-6.0-1.el6.i686 zip-3.0-1.el6.i686 bzip2-libs-1.0.5-7.el6_0.i686 gzip-1.3.12-18.el6.i686 [root@server Packages]# rpm -qa   grep network system-config-network-tui-1.6.0.el6.2-1.el6.noarch</pre> 
4C Configuring and Managing Storage	<pre>[root@server ~]# cd /dev [root@server dev]# ls agpgart          loop0           ram12          tty      tty36      tty7 autofs          loop1           ram13          tty0      tty37      tty8 block            loop2           ram14          tty1      tty38      tty9 bsg              loop3           ram15          tty10     tty39      tty50 bus              loop4           ram2           tty2      tty4       tty51</pre>

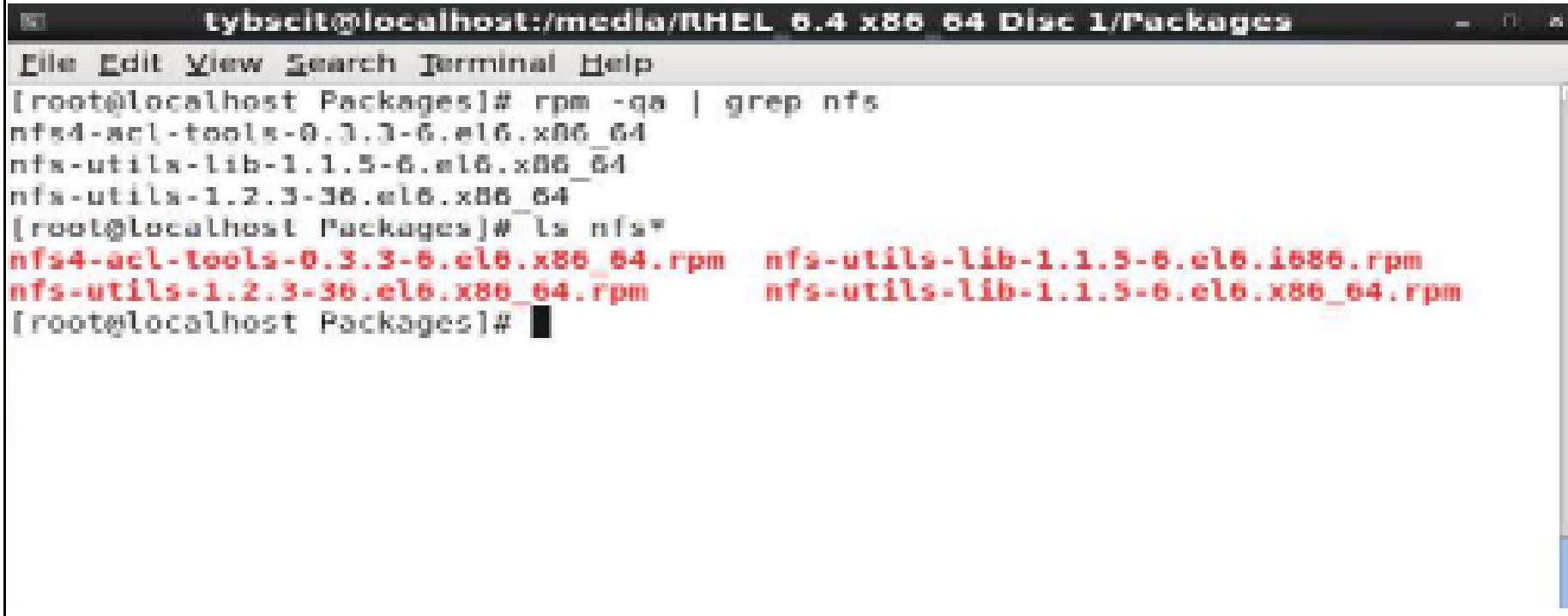
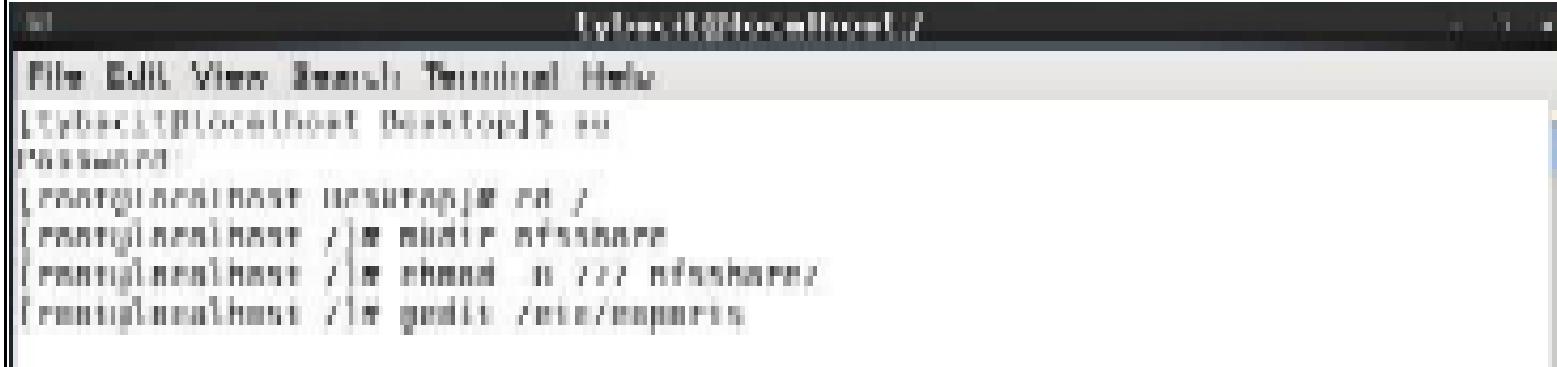
```
[root@server dev]# fdisk /shm  
Unable to open /shm  
[root@server dev]# fdisk /sda  
Unable to open /sda  
[root@server dev]# fdisk /snd  
Unable to open /snd  
[root@server dev]#
```

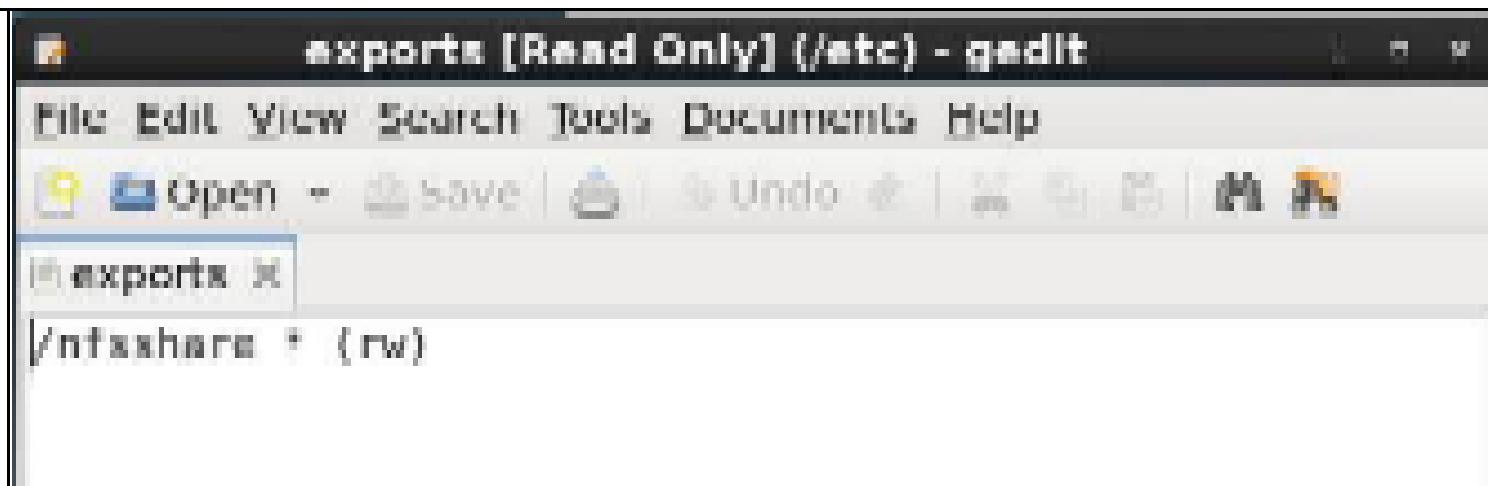
# 4D Connecting to the Network

```
[root@server Desktop]# cd ..  
[root@server ~]# ip addr show  
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 16436 qdisc noqueue state UNKNOWN  
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00  
    inet 127.0.0.1/8 scope host lo  
        inet6 ::1/128 scope host  
            valid_lft forever preferred_lft forever  
2: eth0: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc pfifo_fast state UNKNOWN qlen 1000  
    link/ether 00:0c:29:2d:ed:ed brd ff:ff:ff:ff:ff:ff  
    inet 192.168.1.3/24 brd 192.168.1.255 scope global eth0  
        inet6 fe80::20c:29ff:fe2d:eded/64 scope link  
            valid_lft forever preferred_lft forever  
[root@server ~]#
```



## Practical 5

Practical 5	Configuring Server for File Sharing
5A	<p>Configuring NFS Server and Client</p> <p>On the server machine (RHEL1)</p> <p>Step 1: Install nfs package</p> <p>#rpm -qa   grep nfs [to search installed nfs packages]</p> <p>#ls nfs* [to show all the nfs packages available]</p> <p>#rpm -ivh [packageName] [to install a package]</p>  <p>The terminal window shows the following command and its output:</p> <pre>[root@localhost Packages]# rpm -qa   grep nfs nfs4-acl-tools-0.3.3-6.el6_64 nfs-utils-lib-1.1.5-6.el6_64 nfs-utils-1.2.3-36.el6_64 [root@localhost Packages]# ls nfs* nfs4-acl-tools-0.3.3-6.el6_64.rpm  nfs-utils-lib-1.1.5-6.el6_64.rpm nfs-utils-1.2.3-36.el6_64.rpm      nfs-utils-lib-1.1.5-6.el6_64.rpm [root@localhost Packages]#</pre> <p>Step 2: Create a shared directory in Root (/) and put share information in exports files</p>  <p>The terminal window shows the following commands:</p> <pre>[root@localhost ~]# touch /etc/nasshare [root@localhost ~]# chmod u=rwX,g=rx,o=rx /etc/nasshare [root@localhost ~]# nano /etc/exports [root@localhost ~]# exit</pre>



```
exports [Read Only] (/etc) - gedit
File Edit View Search Tools Documents Help
Open Save Undo | 1234567890 | Print
exports
/nfsshare * (rw)
```

Step 3: Start nfs service, stop firewall, stop ftp service.



```
tyb@tyb-OptiPlex-5090:~$ Starting RPC idmapd: [ OK ]
Starting NFS daemon: [ OK ]
[root@localhost ~]# service nfs stop
Shutting down NFS daemon: [ OK ]
Shutting down NFS mountd: [ OK ]
Shutting down NFS quotas: [ OK ]
Shutting down NFS services: [ OK ]
[root@localhost ~]# service nfs restart
Shutting down NFS daemon: [FAILED]
Shutting down NFS mountd: [FAILED]
Shutting down NFS quotas: [FAILED]
Starting NFS services: exportfs: No options for /nfsshare *: suggest *[sync] to
                           avoid warning
exportfs: No host name given with /nfsshare (rw), suggest *(rw) to avoid warning
exportfs: incompatible duplicated export entries:
exportfs:      *:/nfsshare (0x424) (IGNORED)
exportfs:      *:/nfsshare (0x425)

Starting NFS quotas:
Starting NFS mountd:
Stopping RPC idmapd:
Starting RPC idmapd:
Starting NFS daemon: [ OK ]
[root@localhost ~]#
```



```
[root@tyb-OptiPlex-5090 ~]# /bin/systemctl stop firewalld
[tyb@tyb-OptiPlex-5090 ~]# /bin/systemctl stop iptables
[tyb@tyb-OptiPlex-5090 ~]# /bin/systemctl start firewalld
[tyb@tyb-OptiPlex-5090 ~]# /bin/systemctl start iptables
```

Step 4: Check server IP Address and share name.

	<pre> tybscit@localhost:/nfsshare File Edit View Search Terminal Help [tybscit@localhost /]# ifconfig eth0 eth0      Link encap:Ethernet HWaddr 00:0C:29:65:90:8C           inet addr:192.168.181.130  Bcast:192.168.181.255  Mask:255.255.255.0           inet6 addr: fe80::20c:29ff:fe65:908c/64 Scope:Link              UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1              RX packets:12 errors:0 dropped:0 overruns:0 frame:0              TX packets:18 errors:0 dropped:0 overruns:0 carrier:0              collisions:0 txqueuelen:1000              RX bytes:1348 (1.3 KiB)  TX bytes:1844 (1.8 KiB)              Interrupt:19 Base address:0x2000  [tybscit@localhost /]# showmount -e localhost Export list for localhost: /nfsshare *  [tybscit@localhost /]# cd nfsshare/ [tybscit@localhost nfsshare]# cat &gt; test hello this is the shared file ^Z [1]+  Stopped                  cat &gt; test [tybscit@localhost nfsshare]# cat test hello this is the shared file [tybscit@localhost nfsshare]# ls test [tybscit@localhost nfsshare]# </pre> <p style="text-align: center;">On the client machine (RHEL2)</p> <p>Step 1: Create a mount point /clientnfs #mkdir /clientnfs</p> <p>Step 2: mount the server location to mount point.</p> <pre>#mount -t nfs 192.168.181.130:/nfsshare /clientnfs</pre>
5B	Configuring Samba

5C	Configuring FTP
----	-----------------

## **K.E.T's V.G. VAZE COLLEGE**

Roll: A051

Name: Mrunali.S.Walekar

### Practical 6

Practical 6	DNS, DHCP and Mail Server
6A	<p>Configuring DNS</p> <p>Go to main -&gt; terminal</p> <p>Gedit /etc/hosts</p> <p>Add after 2 line – 192.168.1.3 srver.tyit.com</p> <p>Save</p> <p>Gedit /etc/sysconfig/network-scripts/ifcfg.eth0</p> <p>File open</p> <p>Gedit /etc/sysconfig/network</p> <p>Localhost domain –delete</p> <p>Write- server.tyit.com</p>

Save

Gedit /etc/resolv.conf

Add NAMESERVER 192.168.1.3

Save

Cd /etc

Service network restart ok ok

If not then click on network manager to turn it on then try

Now, cd ..

Cd media/RHEL..../Packages

Now,

Rpm -ivh bind\*

Install

Gedit /etc/named.conf empty

Install now properly

Ls bind\*

Now,

Rpm -vh bind-9.7.3-2.e16.i686.rpm

Gedit /etc/named.conf  
File will open  
Options.....?  
Cd etc  
Ls named\*  
Gedit /etc/named.rfc192.zones  
  
Copy one zone “ “ in {....}  
Than change name as zone .....?  
And file reversed.zone  
  
Cd .. (go to root)  
Cd /var/named  
Ls  
Cp named.localhost Forward.zone  
Cp named.loopback reversed.zone  
Gedit forwar.zone  
IN SOA server.tyit.com root.server.tyit.com { ...}  
  
IN NS server.tyit.com  
SERVER IN A 1912.168.1.3

Gedit reversed.zone  
IN SOA server.tyit.com root.server.tyit.com

IN NS sever.tyit.com  
IN PTR server.tyit.com

Chgrp named forward.zoe

Ls -l

Chgrp named reversed.zone

Ls -l

Service named start

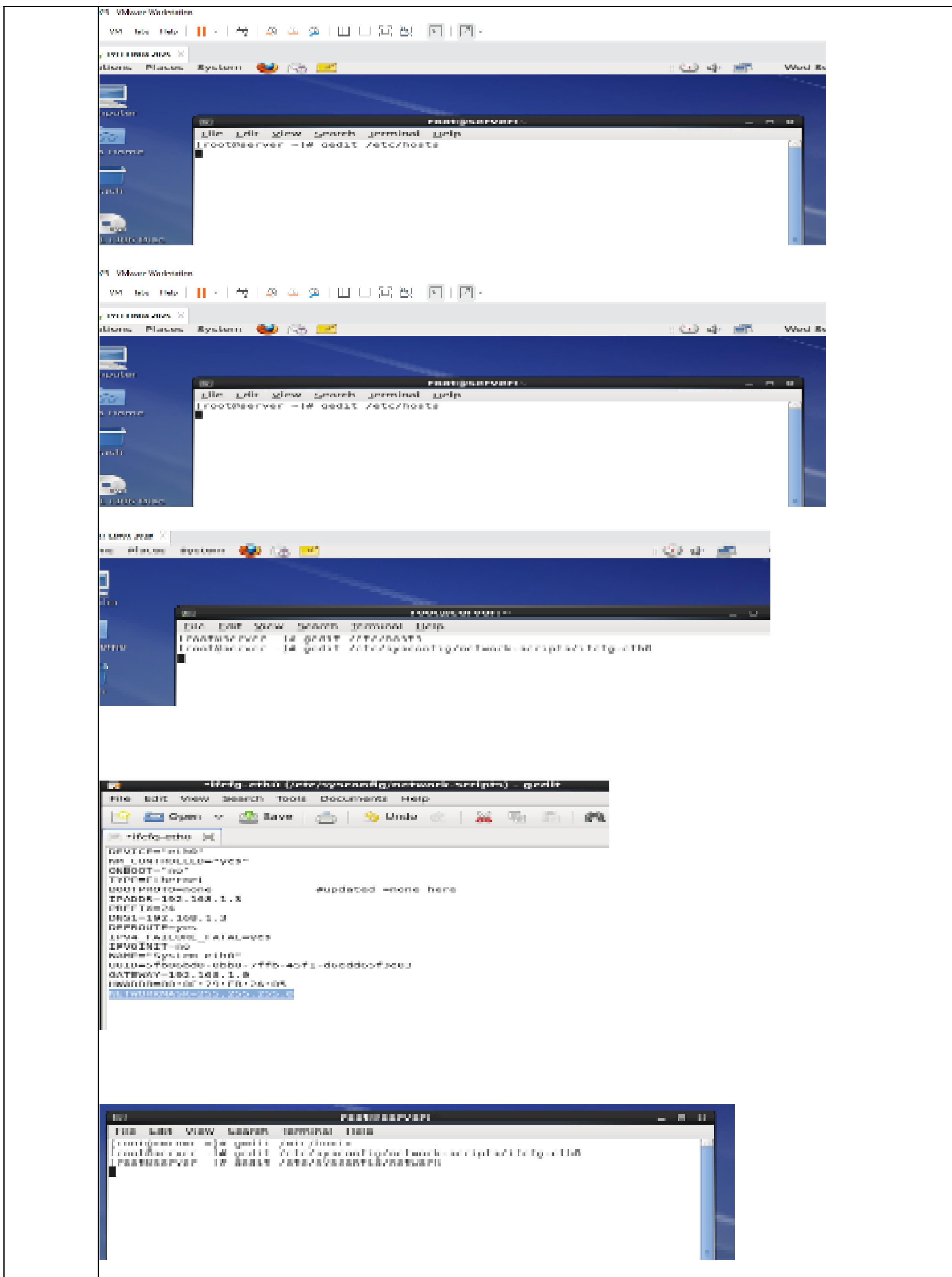
Dig server.tyit.com

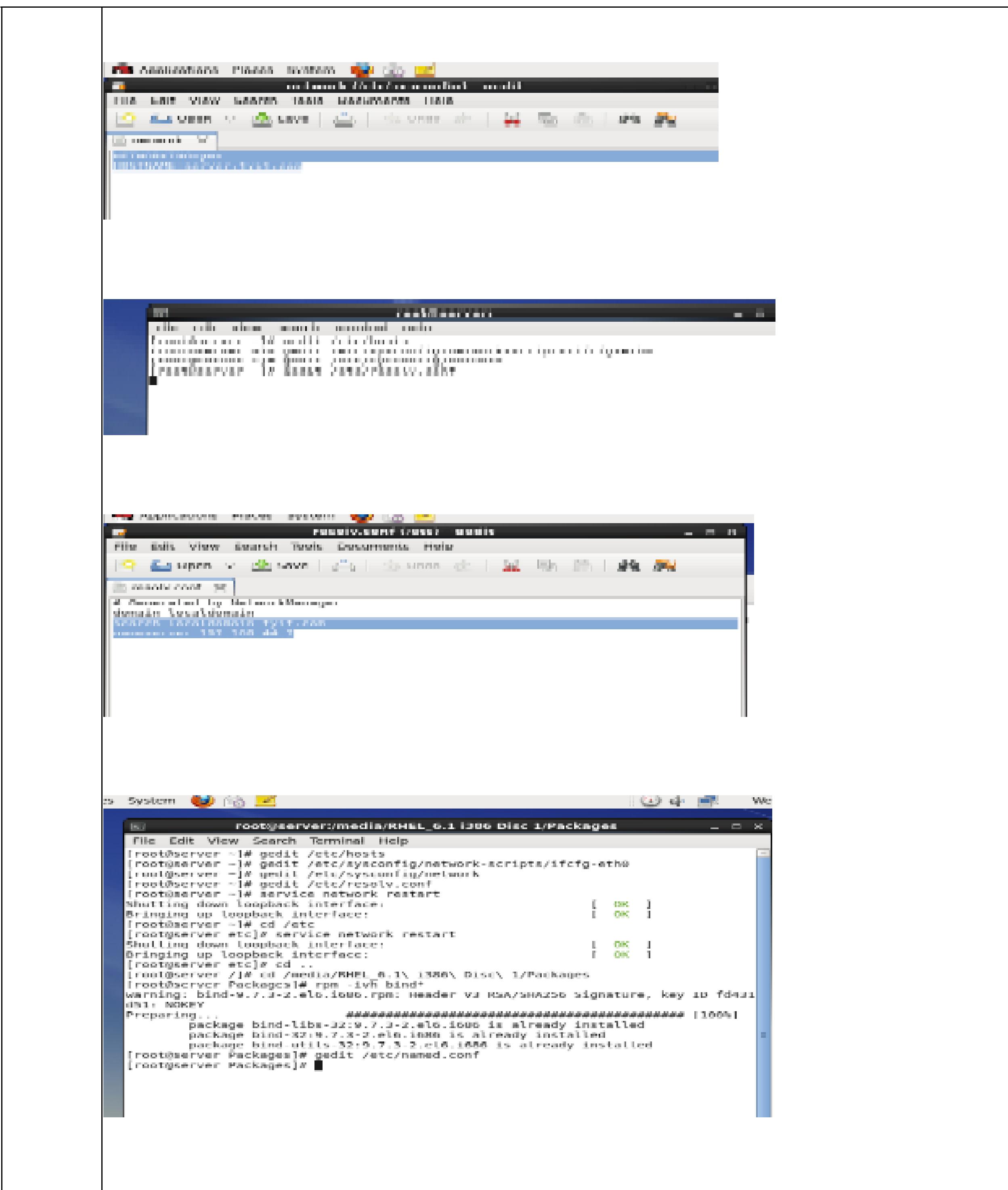
If timed out the turn on the network manager(systemeth0)

The try it again

Requirements for configuration DNS

Bind package create forward & reversed file





The image shows two screenshots of a Linux desktop environment, likely Red Hat Enterprise Linux (RHEL), demonstrating the configuration of a DNS server.

**Screenshot 1: Configuration of /etc/named.conf**

A terminal window titled "gedit named.conf (/etc)" is open, showing the configuration file for the BIND DNS server. The file contains the following configuration:

```

// named.conf
// Provided by Red Hat bind package to configure the ISC BIND named(8) DNS
// server as a caching only nameserver (as a localhost DNS resolver only).
//
// See /usr/share/doc/bind*/sample/ for example named configuration files.

options {
    listen-on port 53 { 192.168.1.3; };
    /*listen-on-v6 port 53 { ::1; };*/
    directory      "/var/named";
    dump-file      "/var/named/data/cache_dump.db";
    statistics-file "/var/named/data/named_stats.txt";
    memstatistics-file "/var/named/data/named_mem_state.txt";
    allow-query   { any; };
    recursion yes;

    dnssec enable yes;
    dnssec-validation yes;
    dnssec-lookaside auto;

    /* Path to ISC DLV key */
    bindkeys-file "/etc/named.iscdlv.key";
};

logging {
    channel default debug {

```

The "dnssec enable yes;" line is highlighted with a blue selection bar.

**Screenshot 2: Terminal Session for DNS Configuration**

A terminal window titled "root@server:/etc" is open, showing a series of commands run by the root user:

```

[root@server ~]# gedit /etc/hosts
[root@server ~]# gedit /etc/sysconfig/network-scripts/ifcfg-eth0
[root@server ~]# gedit /etc/sysconfig/network
[root@server ~]# gedit /etc/resolv.conf
[root@server ~]# service network restart
Shutting down loopback interface: [ OK ]
Bringing up loopback interface: [ OK ]
[root@server ~]# cd /etc
[root@server etc]# service network restart
Shutting down loopback interface: [ OK ]
Bringing up loopback interface: [ OK ]
[root@server etc]# cd ..
[root@server ~]# cd /media/RHEL_6.1_1386_Disc_1/Packages
[root@server Packages]# rpm -ivh bind*
warning: bind-9.7.3-2.el6.1686.rpm: Header V3 RSA/SHA256 Signature, Key ID fd431
d51: NOKEY
Preparing... ################################################ [100%]
package bind-libs-32:9.7.3-2.el6.i686 is already installed
package bind-32:9.7.3-2.el6.i686 is already installed
package bind-utils-32:9.7.3-2.el6.i686 is already installed
[root@server Packages]# gedit /etc/named.conf
[root@server Packages]# gedit /etc/named.conf
[root@server Packages]# cd ..
[root@server RHEL_6.1_1386_Disc_1]# cd /etc
[root@server etc]# ls named*
named.conf  named.iscdlv.key  named.rfc1912.zones~
named.conf~  named.rfc1912.zones  named.root.key
[root@server etc]# gedit named.rfc1912.zones

```

The "named.rfc1912.zones" file is currently selected in the terminal window.

The screenshot shows a Gedit text editor window with the title "named.rfc1912.zones (/etc) - gedit". The file contains the following configuration:

```
title "named, localhost";
allow-update { none; };

};

zone "1.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.ip6.arpa" IN {
    type master;
    file "named.loopback";
    allow-update { none; };
};

zone "1.0.0.127.in-addr.arpa" IN {
    type master;
    file "named.loopback";
    allow-update { none; };
};

zone "0.in-addr.arpa" IN {
    type master;
    file "named.empty";
    allow-update { none; };
};

zone "1.108.192.in-addr.arpa" IN {
    type master;
    file "reversed.zone";
    allow-update { none; };
};
```

```
root@server:/var/named
File Edit View Search Terminal Help
[root@server ~]# service network restart
Shutting down loopback interface: [ OK ]
Bringing up loopback interface: [ OK ]
[root@server ~]# cd /etc
[root@server etc]# service network restart
Shutting down loopback interface: [ OK ]
Bringing up loopback interface: [ OK ]
[root@server etc]# cd ..
[root@server /]# cd /media/RHEL_6.1_i386/Disc 1/Packages
[root@server Packages]# rpm -ivh bind*
warning: bind-9.7.3-2.el6.1686.rpm: Header V3 RSA/SHA256 Signature, key ID fd431
ds1: NOKEY
Preparing.. . [ooooooooooooooooooooooaaaaaaaaaaaaaaa ] [100%]
      package bind-libs-32:9.7.3-2.el6.1686 is already installed
      package bind-32:9.7.3-2.el6.1686 is already installed
      package bind-utils-32:9.7.3-2.el6.1686 is already installed
[root@server Packages]# gedit /etc/named.conf
[root@server Packages]# gedit /etc/named.conf
[root@server Packages]# cd ..
[root@server RHEL_6.1_i386 Disc 1]# cd /etc
[root@server etc]# ls named*
named.conf      named.iscdlv.key      named.rfc1912.zones-
named.conf~     named.rfc1912.zones  named.root.key

named:
[root@server etc]# gedit named.rfc1912.zones
[root@server etc]# cd ..
[root@server /]# cd /var/named
[root@server named]# ls
data    forward.zone  named.ca      named.localhost  reversed.zone   slaves
dynamic forward.zone~  named.empty  named.loopback  reversed.zone~
[root@server named]# cp named.localhost forward.zone
cp: overwrite 'forward.zone'? y
[root@server named]# cp named.loopback reversed.zone
cp: overwrite 'reversed.zone'? yes
[root@server named]# gedit forward.zone
```

```
[root@server ~]# service network restart
Shutting down loopback interface:                                [ OK ]
Bringing up loopback interface:                                [ OK ]
[root@server ~]# cd /etc
[root@server etc]# service network restart
Shutting down loopback interface:                                [ OK ]
Bringing up loopback interface:                                [ OK ]
[root@server etc]# cd ..
[root@server /]# cd /media/RHEL_6.1_i386/Disc_1/Packages
[root@server Packages]# rpm -ivh bind*
warning: bind-9.7.3-2.el6.i686.rpm: Header V3 RSA/SHA256 Signature, key ID fd431
ds1: NOKEY
Preparing...                                               ################################################ [100%]
  package bind-libs-32:9.7.3-2.el6.i686 is already installed
  package bind-32:9.7.3-2.el6.i686 is already installed
  package bind-utils-32:9.7.3-2.el6.i686 is already installed
[root@server Packages]# gedit /etc/named.conf
[root@server Packages]# gedit /etc/named.conf
[root@server Packages]# cd ..
[root@server RHEL_6.1_i386 Disc 1]# cd /etc
[root@server etc]# ls named*
named.conf      named.iscdlv.key      named.rfc1912.zones~
named.conf~     named.rfc1912.zones  named.root.key

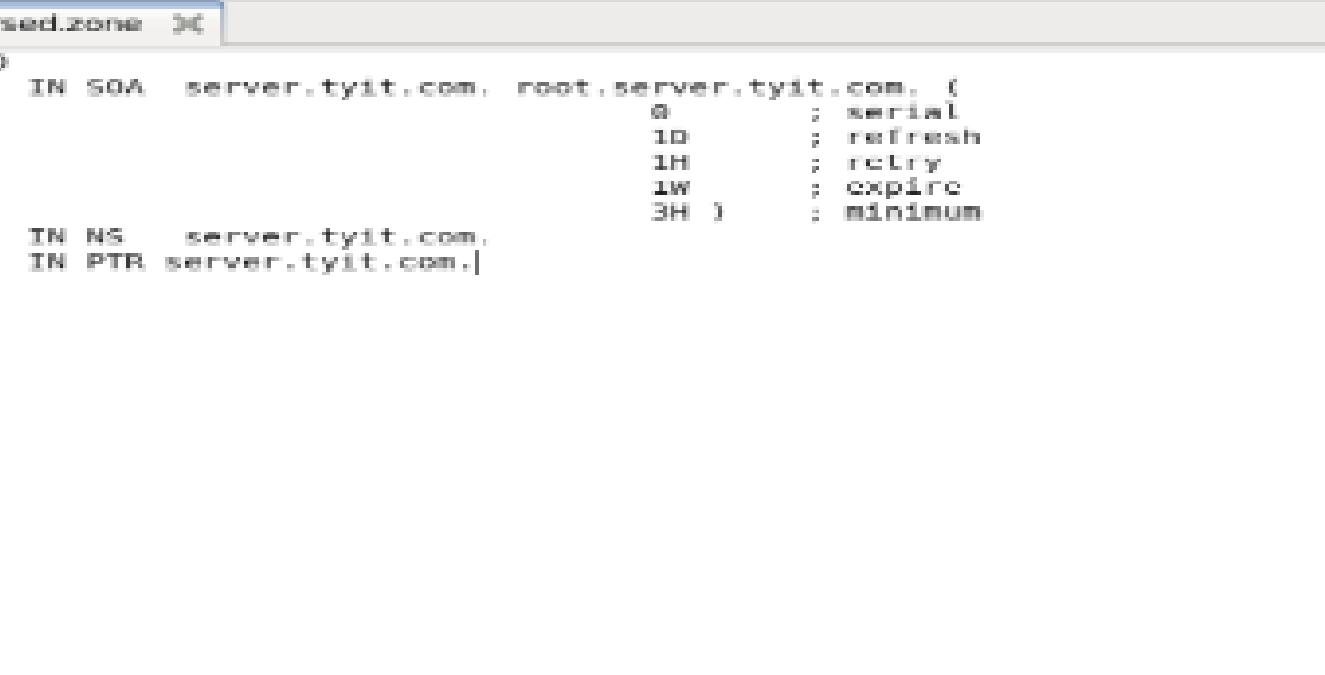
named:
[root@server etc]# gedit named.rfc1912.zones
[root@server etc]# cd ..
[root@server /]# cd /var/named
[root@server named]# ls
data    forward.zone  named.ca      named.localhost  reversed.zone   slaves
dynamic forward.zone-  named.empty   named.loopback  reversed.zone-
cp: overwrite 'forward.zone'? y
[root@server named]# cp named.localhost forward.zone
cp: overwrite 'reversed.zone'? yes
[root@server named]# gedit forward.zone
```

```
Applications Places System
forward.zone (/var/named) - gedit
File Edit View Search Tools Documents Help
Open Save Undo | < > < > < > < > < >
forward.zone 3C
$TTL 1D
@ IN SOA server.tyit.com. root.server.tyit.com. (
          0           ; serial
          1D           ; refresh
          1H           ; retry
          1W           ; expire
          3H )         ; minimum
IN NS server.tyit.com.
server IN A 192.168.1.3| gnatu
www www install ed
install sed.z
sed.z
Plain Text Tab Width: 8 Ln 9, Col 32 INS ...
cp: overwrite 'reversed.zone'? yes
[root@server named]# gedit forward.zone
```

```
root@server:/var/named
File Edit View Search Terminal Help
Shutting down loopback interface: [ OK  ]
Bringing up loopback interface: [ OK  ]
[root@server ~]# cd /etc
[root@server etc]# service network restart
Shutting down loopback interface: [ OK  ]
Bringing up loopback interface: [ OK  ]
[root@server etc]# cd ..
[root@server /]# cd /media/RHEL_6.1\ i386\ Disc 1/Packages
[root@server Packages]# rpm -ivh bind*
warning: bind-9.7.3-2.el6.1686.rpm: Header V3 RSA/SHA256 Signature, key ID fd431d51: NOKEY
Preparing...                                              [100%]
  package bind-libs-32:9.7.3-2.el6.1686 is already installed
  package bind-32:9.7.3-2.el6.1686 is already installed
  package bind-utils-32:9.7.3-2.el6.1686 is already installed
[root@server Packages]# gedit /etc/named.conf
[root@server Packages]# gedit /etc/named.conf
[root@server Packages]# cd ..
[root@server RHEL_6.1 i386 Disc 1]# cd /etc
[root@server etc]# ls named*
named.conf      named.iscdlv.key      named.rfc1912.zones-
named.conf~     named.rfc1912.zones  named.root.key

named:
[root@server etc]# gedit named.rfc1912.zones
[root@server etc]# cd ..
[root@server /]# cd /var/named
[root@server named]# ls
data    forward.zone  named.ca  named.localhost  reversed.zone  slaves
dynamic forward.zone-  named.empty  named.loopback  reversed.zone-
[root@server named]# cp named.localhost forward.zone
cp: overwrite `forward.zone'? y
[root@server named]# cp named.loopback reversed.zone
cp: overwrite `reversed.zone'? yes
[root@server named]# gedit forward.zone
[root@server named]# gedit reversed.zone
```

med [reversed.zone (/var/n...)]



The screenshot shows a GIMP image editor window titled "reversed.zone (/var/named) - gedit". The file path is "/var/named/reversed.zone". The menu bar includes File, Edit, View, Search, Tools, Documents, Help. The toolbar includes Open, Save, Undo, Redo, Cut, Copy, Paste, Find, Replace, Select, and Find Next. The main text area contains the following DNS zone file:

```
STTL 10
@ IN SOA server.tyit.com. root.server.tyit.com. (
    0 ; serial
    10 ; refresh
    1H ; rtry
    1W ; expire
    3H ) ; minimum
IN NS server.tyit.com.
IN PTR server.tyit.com.]
```

```

root@server:/var/named
File Edit View Search Terminal Help
named.conf  named.rfc1912.zones  named.root.key

named:
[root@server etc]# gedit named.rfc1912.zones
[root@server etc]# cd ..
[root@server /]# cd /var/named
[root@server named]# ls
data  forward.zone  named.ca  named.localhost  reversed.zone  slaves
dynamic  forward.zone  named.empty  named.loopback  reversed.zone-
[root@server named]# cp named.localhost forward.zone
cp: overwrite 'forward.zone'? y
[root@server named]# cp named.loopback reversed.zone
cp: overwrite 'reversed.zone'? yes
[root@server named]# gedit forward.zone
[root@server named]# gedit reversed.zone
[root@server named]# chgrp named.forward.zone
chgrp: missing operand after `named.forward.zone'
Try `chgrp --help' for more information.
[root@server named]# chgrp named forward.zone
[root@server named]# ls -l
total 44
drwxrwx--- 2 named named 4096 Sep 13 16:54 data
drwxrwx--- 2 named named 4096 Sep 17 16:23 dynamic
-rw-r----- 1 root  named 194 Sep 17 16:53 forward.zone
-rw-r----- 1 root  named 194 Sep 17 16:53 forward.zone-
-rw-r----- 1 root  named 1892 Feb 18 2008 named.ca
-rw-r----- 1 root  named 152 Dec 15 2009 named.empty
-rw-r----- 1 root  named 152 Jun 21 2007 named.localhost
-rw-r----- 1 root  named 168 Dec 15 2009 named.loopback
-rw-r----- 1 root  named 194 Sep 17 16:55 reversed.zone
-rw-r----- 1 root  named 168 Sep 17 16:48 reversed.zone-
drwxrwx--- 2 named named 4096 Mar 28 2011 slaves
[root@server named]# chgrp named reversed.zone
[root@server named]# service named start
Starting named: named: already running
[root@server named]# dig server.tyit.com
[OK]

```

## Output:

```

root@server named]# chgrp named reversed.zone
[root@server named]# service named start
Starting named: named: already running
[root@server named]# dig server.tyit.com
; <--> DIG 9.7.3-RedHat-9.7.3-2.el6 <--> server.tyit.com
;; global options: +cmd
;; connection timed out; no servers could be reached
[root@server named]# dig server.tyit.com

; <--> DIG 9.7.3-RedHat-9.7.3-2.el6 <--> server.tyit.com
;; global options: +cmd
;; connection timed out; no servers could be reached
[root@server named]# dig 192.168.1.8

; <--> DIG 9.7.3-RedHat-9.7.3-2.el6 <--> 192.168.1.8
;; global options: +cmd
;; Got answer:
;; ->HEADER<- opcode: QUERY, status: NOERROR, id: 26106
;; Flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 1, ADDITIONAL: 0
;; QUESTION SECTION:
192.168.1.8.          IN      A
;; AUTHORITY SECTION:
;          5 IN SOA a.root-servers.net. nstld.verisign-lab.com. 2025051602 1000 900 604800 86400
;; query time: 16 msec
;; SERVER: 192.168.1.8[192.168.1.8]
;; WHEN: wed sep 17 11:01:46 2014
;; MSG SIZE rcvd: 104
[root@server named]#

```

6B

Configuring DHCP

Ifconfig

For editing – go to network manager.(two pc)

Right click , wired ->system eth0 than edit

Click on manual -> near table ->click add-> put address 192.168.1.3

Net mask – 255.255.255.0

Dns sever – 192.168.1.3

Gateway- 192.168.1.0

Ifconfig

If ip add has changed to 192.... It is correct

If no than type = service network restart.

rpm -qa | grep dhcp

ls

gedit /etc/dhcp/dhcpd.conf

close open file.

Cp /usr/share/doc/dhcp-4.1.1/dhcpd.conf.sample /etc/dhcp/dhcpd.conf

Overwrite? Yes

gedit /etc/dhcp/dhcpd.conf

go to line subnet 255.255.255.0

(below this is very basic subnet declaration)

Change it to

Service dhcp start

Service dhcp restart

Chkconfig dhcpcd on

Chkconfig –list dhcpcd

Dhcp 6:off 1:off 2:on

Dhcp server is setup now machine is ready

Close power off

Right click -> manage ->clone ->click->next

Current state create linked clone 0 first ->next ->clone of red.hat linux

Close

Now clone machine will start

Open og linux machine as root -> systemmeth0->edit->manual->apply

Gedit /etc/sysconfig/network-scripts/ifcfg-eth0

Other way

Cd /etc

Cd sysconfig

Cd network-scripts

Gedit ifcfg-eth0

File will open

BOOTPROTO=dhcp (means you are dhcp current )

Now

Service network restart

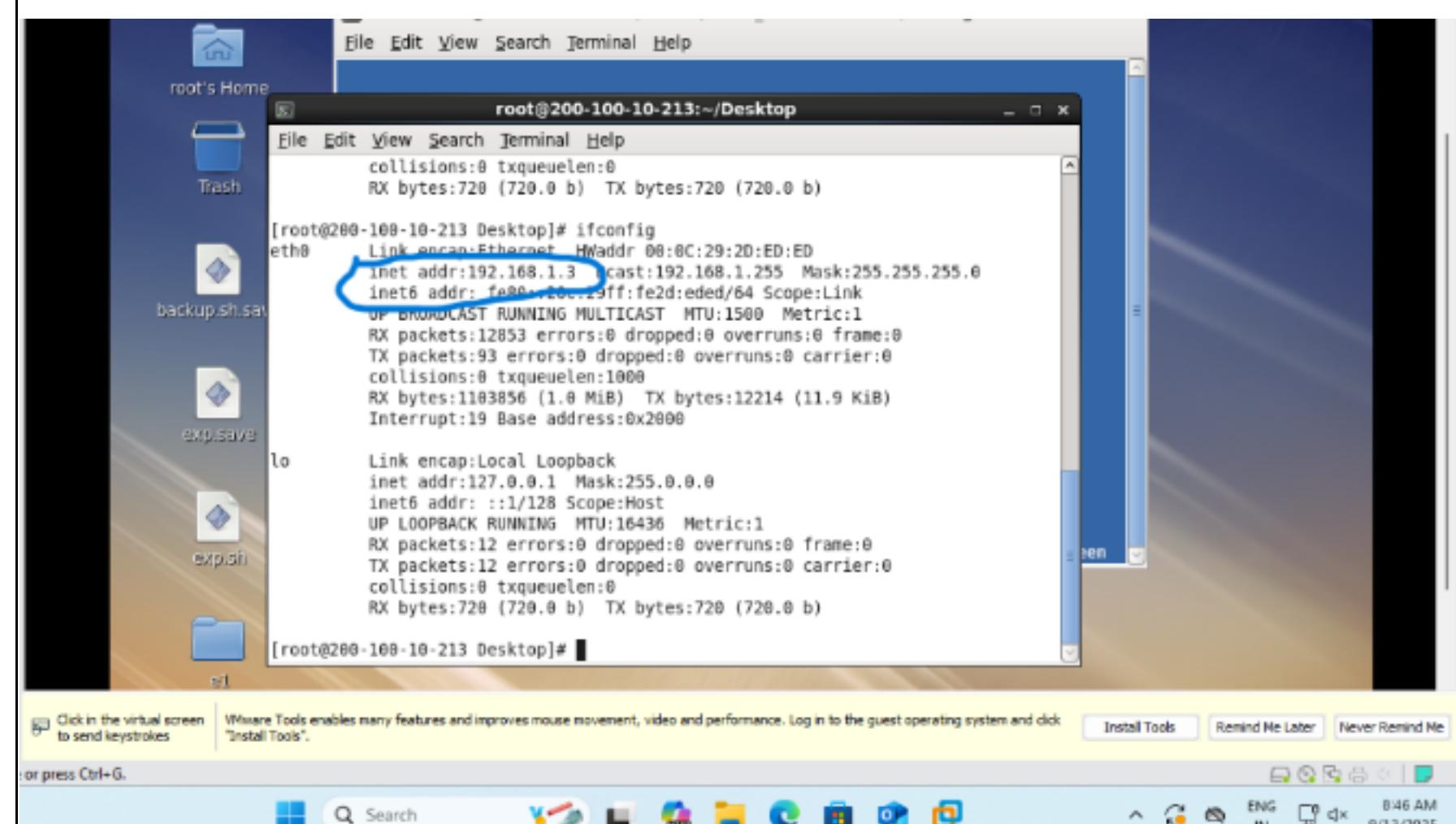
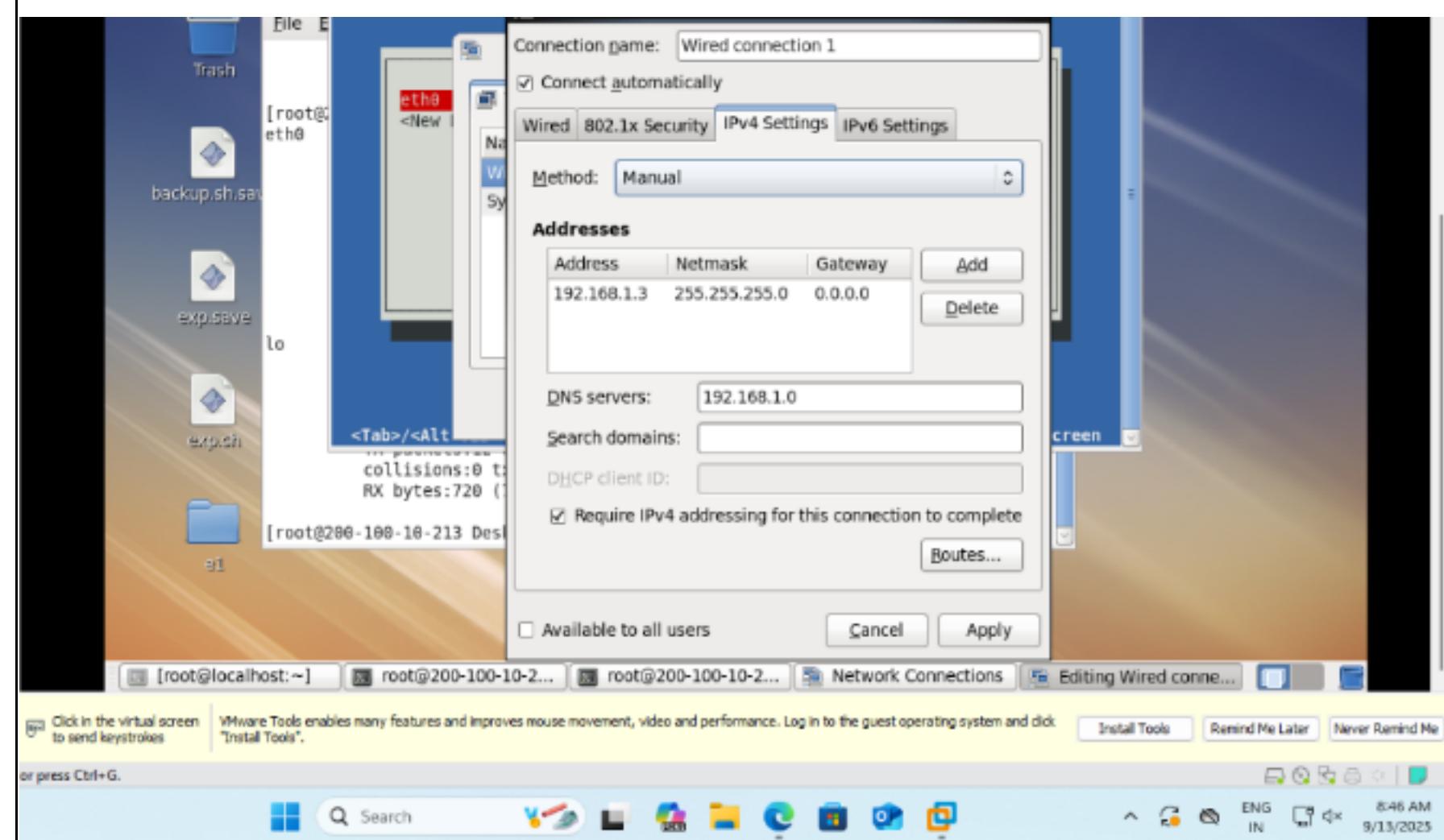
Ok ok will be displayed

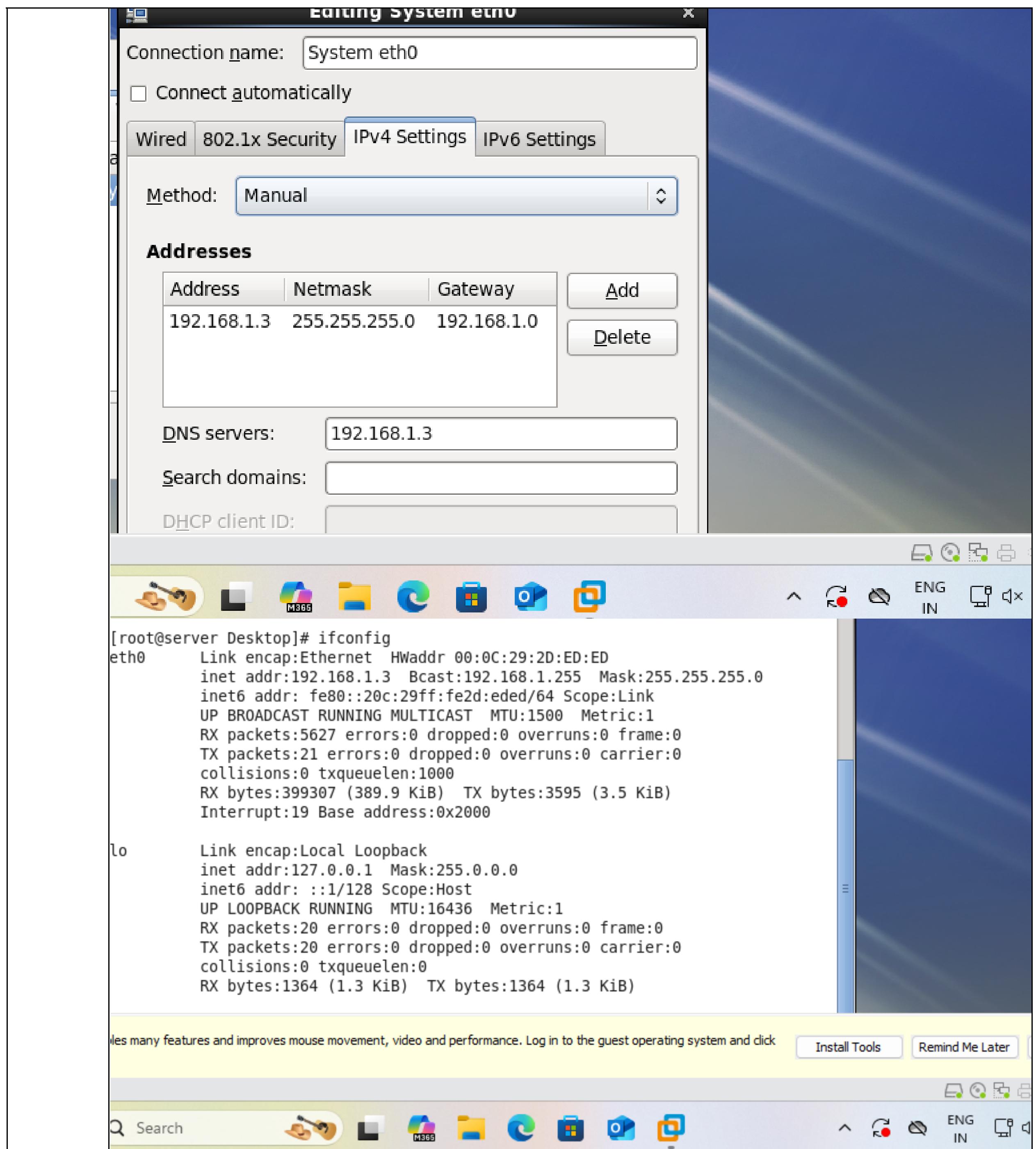
Ifconfig

Minimize-> clone machine -> click right click -> settings -> memory adapter -> custom a virtual machine

Close

~





The screenshot shows a Linux desktop environment with several windows open:

- A terminal window titled "root@server:~/Desktop" showing the output of the "ifconfig" command.
- A file editor window titled "dhcpd.conf (/etc/dhcp) - gedit" displaying the contents of the /etc/dhcp/dhcpd.conf configuration file.
- A terminal window showing the process of copying a sample configuration file:

```
[root@server Desktop]# gedit /etc/dhcp/dhcpd.conf
[root@server Desktop]# cp /usr/share/doc/dhcp-4.1.1/dhcpd.conf.sample /etc/dhcp/
dhcpd.conf
cp: overwrite '/etc/dhcp/dhcpd.conf'? y
[root@server Desktop]#
```

The desktop interface includes a taskbar with icons for various applications like File Explorer, Mail, and Task View. The system tray shows the date and time (9/17/2025, 11:29 AM) and language settings (ENG IN).

The file editor window shows the following configuration:

```
# This is a very basic subnet declaration.

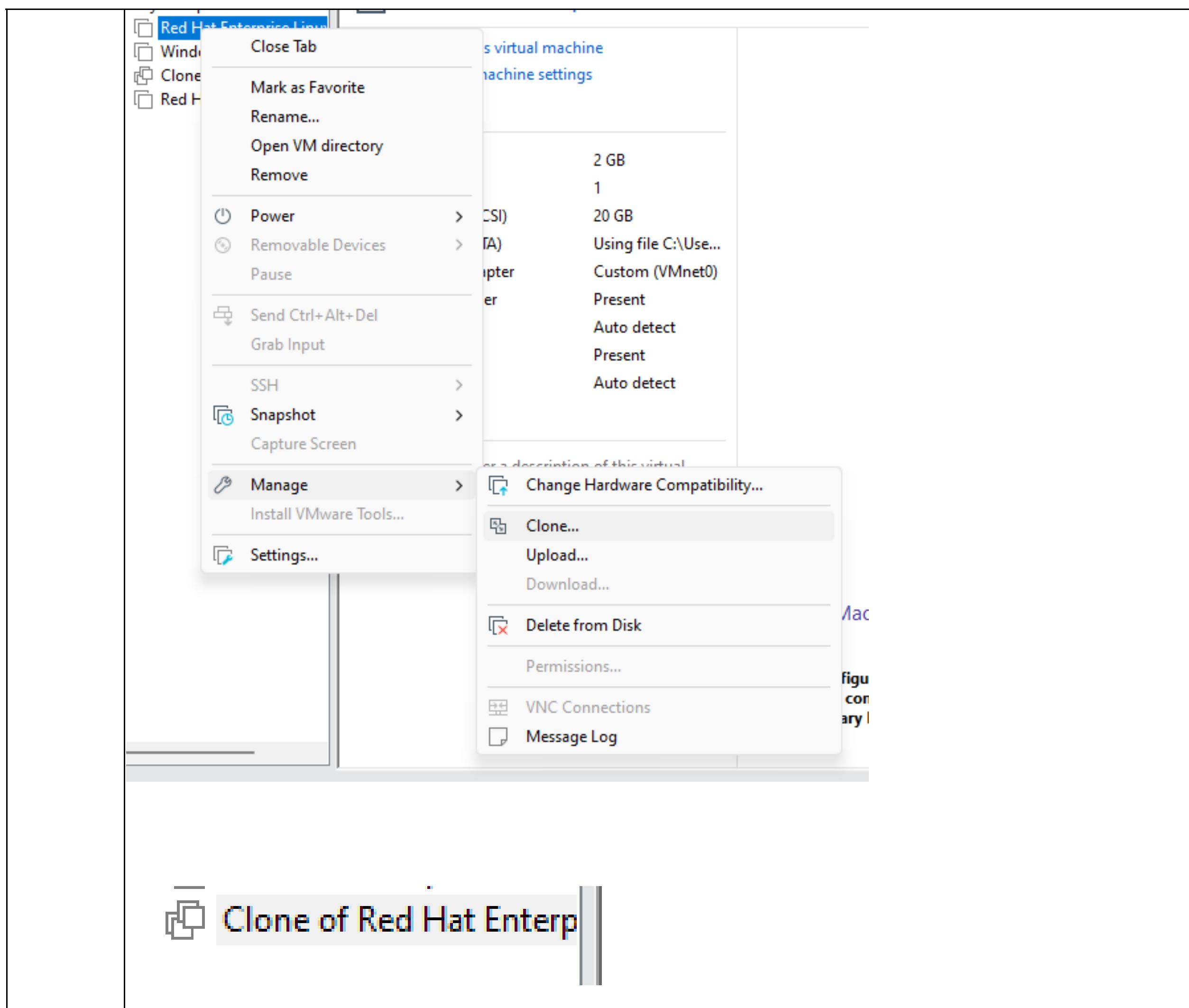
subnet 192.168.1.0 netmask 255.255.255.224{
    range 192.168.1.15 192.168.1.30;
    # option routers rtr-239-0-1.example.org, rtr-239-0-2.example.org;
}

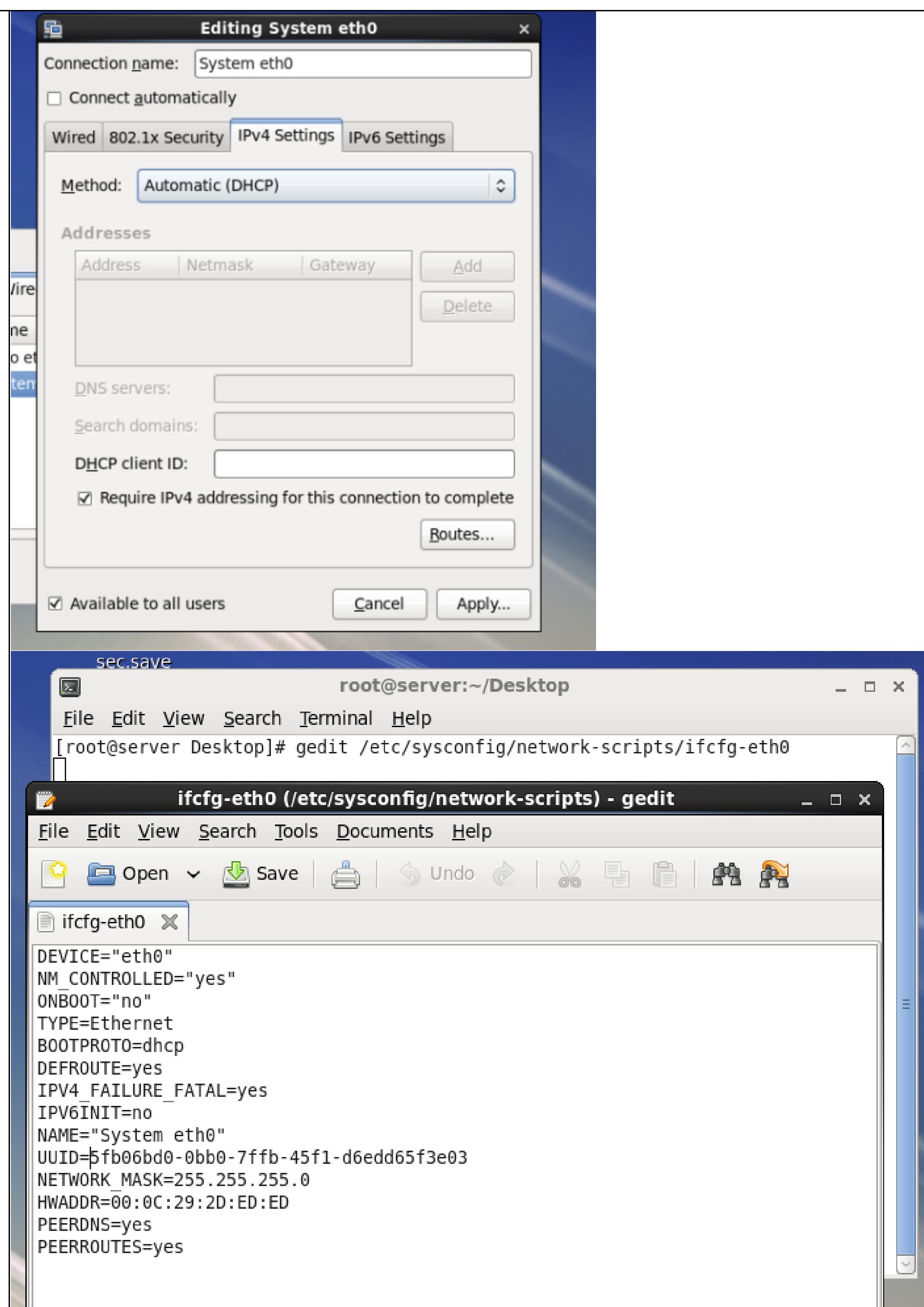
# This declaration allows BOOTP clients to get dynamic addresses,
# which we don't really recommend.

subnet 10.254.239.32 netmask 255.255.255.224 {
```

At the bottom of the desktop screen, there is a terminal window with the following command history:

```
[root@server Desktop]# service dhcpcd start
Starting dhcpcd: [ OK ]
[root@server Desktop]# service dhcpcd restart
Shutting down dhcpcd: [ OK ]
Starting dhcpcd: [ OK ]
[root@server Desktop]# chkconfig dhcpcd on
[root@server Desktop]# chkconfig --list dhcpcd
dhcpcd      0:off  1:off  2:on   3:on   4:on   5:on   6:off
[root@server Desktop]#
```



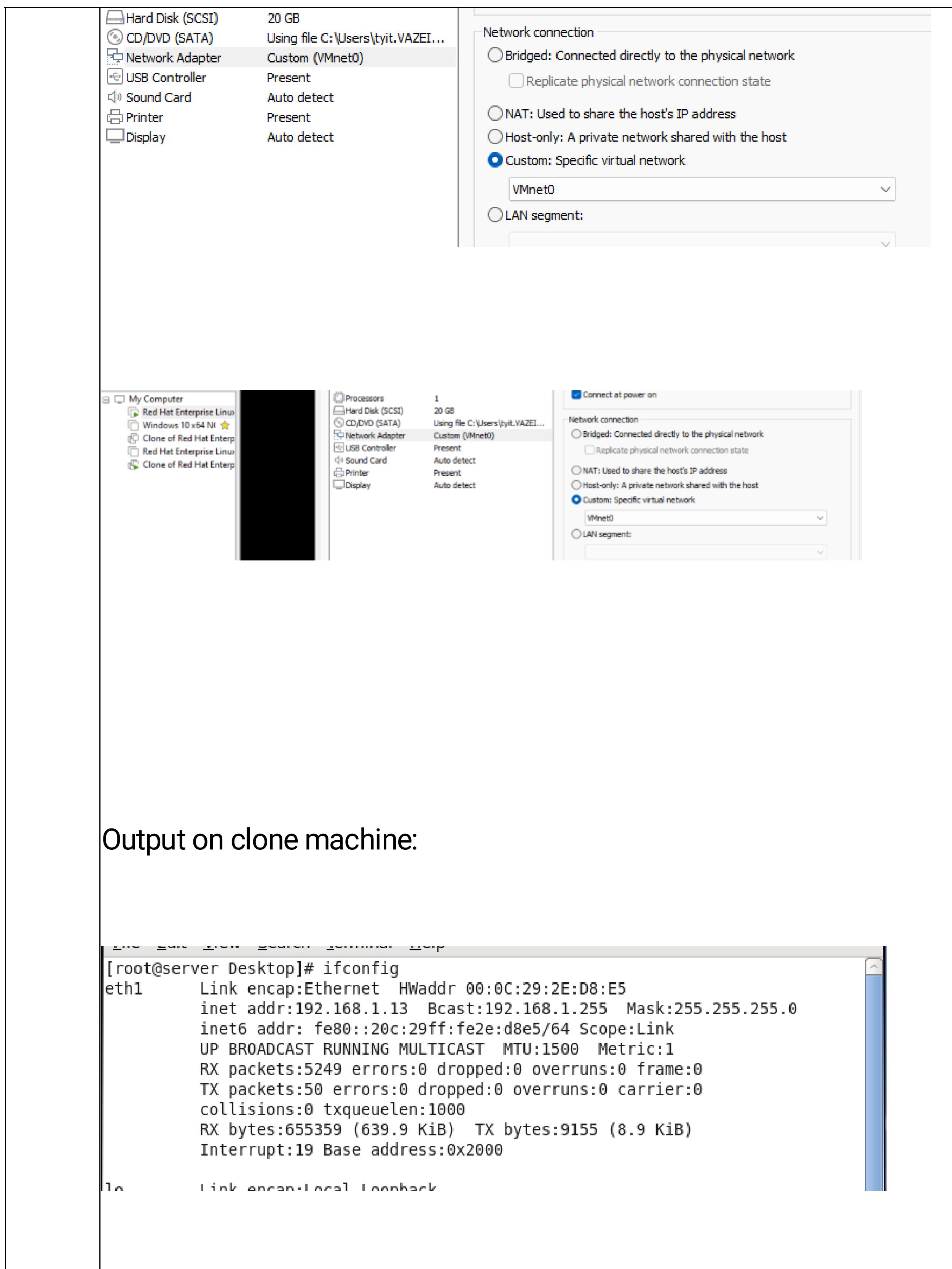


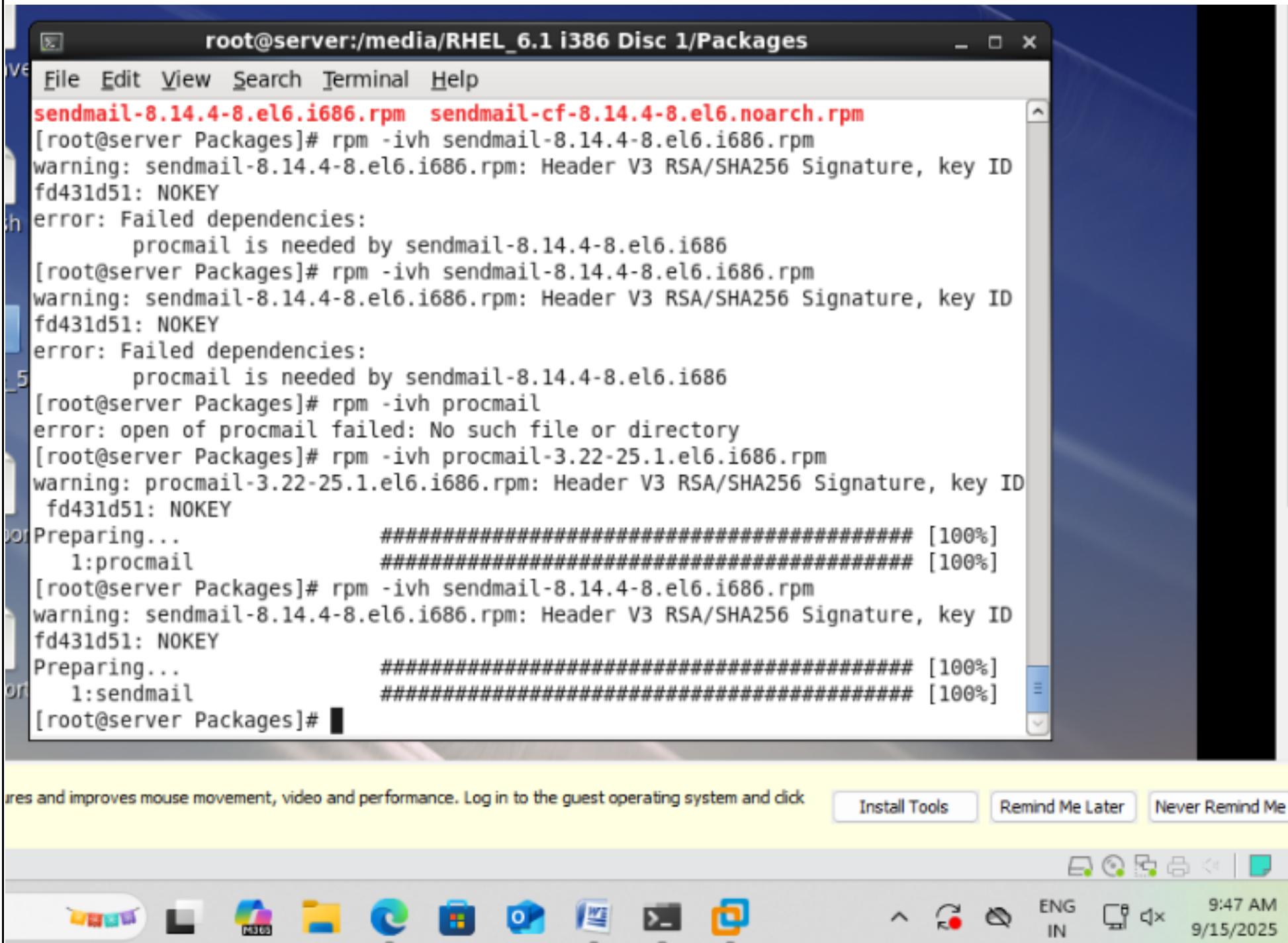
sec.save

root@server:~/Desktop

```
[root@server Desktop]# service network restart
Shutting down loopback interface:                                [  OK  ]
Bringing up loopback interface:                                [  OK  ]
[root@server Desktop]# ifconfig
eth1      Link encap:Ethernet HWaddr 00:0C:29:2E:D8:E5
          inet addr:192.168.1.13  Bcast:192.168.1.255  Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fe2e:d8e5/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:3712 errors:0 dropped:0 overruns:0 frame:0
          TX packets:34 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:462654 (451.8 KiB)  TX bytes:5743 (5.6 KiB)
          Interrupt:19 Base address:0x2000

lo       Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:16436  Metric:1
          RX packets:16 errors:0 dropped:0 overruns:0 frame:0
          TX packets:16 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:0
          RX bytes:960 (960.0 b)  TX bytes:960 (960.0 b)
```



6C	<pre>Rpm -qa   grep sendmail  cd..  cd /etc/media/RHEL.../Packages  ls sendmail*  rpm -ivh procmail...ctrl+d  rpm -ivh sendmail...ctrl+d  rpm -ivh sendmail.cf..ctrl+d  (we have to install all three files if it is not available )</pre>  <p>rpm -qa   grep sendmail</p>

```
root@server:/etc/mail
File Edit View Search Terminal Help
Preparing... #####
1:sendmail #####
[root@server Packages]# rpm -qa | grep sendmail
sendmail-8.14.4-8.el6.i686
[root@server Packages]# cd ..
[root@server RHEL_6.1 i386 Disc 1]# cd ..
[root@server media]# cd ..
[root@server /]# cd /etc/mail
[root@server mail]# ls -l
total 192
-rw-r--r-- 1 root root 469 May 20 2009 access
-rw-r----- 1 root root 12288 Sep 15 09:44 access.db
-rw-r--r-- 1 root root 0 Sep 15 09:44 aliasesdb-stamp
-rw-r--r-- 1 root root 233 Apr 12 2007 domaintable
-rw-r----- 1 root root 12288 Sep 15 09:44 domaintable.db
-rw-r--r-- 1 root root 5584 Jun 17 2010 helpfile
-rw-r--r-- 1 root root 64 Apr 12 2007 local-host-names
-rw-r--r-- 1 root root 997 Apr 12 2007 mailertable
-rw-r----- 1 root root 12288 Sep 15 09:44 mailertable.db
-rwxr-xr-x 1 root root 2700 May 20 2009 make
-rw-r--r-- 1 root root 92 May 20 2009 Makefile
-rw-r--r-- 1 root root 58439 Jun 17 2010 sendmail.cf
-rw-r--r-- 1 root root 7202 May 20 2009 sendmail.mc
-rw-r--r-- 1 root root 41521 Jun 17 2010 submit.cf
Install Tools Remind Me Later Never Remind Me
and improves mouse movement, video and performance. Log in to the guest operating system and click
9:50 AM
ENG IN 9/15/2025
```

cd ..

cd /etc/mail

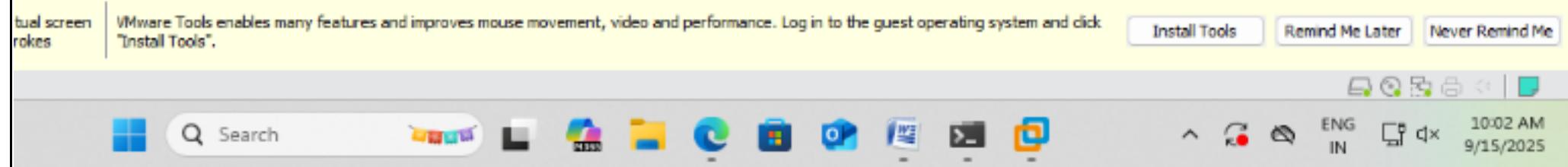
gedit sendmail.mc

(comment line 116)

```
sendmail.mc (etc/mail) - gedit
File Edit View Search Tools Documents Help
Open Save Undo Plain Text Tab Width: 8 Ln 116, Col 3 INS
sendmail.mc X #####
dnl define(`confLOCAL_MAILER', `cyrusv2')dnl
dnl define(`CYRUSV2_MAILER_ARGS', `FILE /var/lib/imap/socket/lmtp')dnl
dnl #
dnl # The following causes sendmail to only listen on the IPV4 loopback
dnl address
dnl # 127.0.0.1 and not on any other network devices. Remove the loopback
dnl # address restriction to accept email from the internet or intranet.
dnl #
# DAEMON_OPTIONS(`Port=smtp,Addr=127.0.0.1, Name=MTA')dnl
dnl #
dnl # The following causes sendmail to additionally listen to port 587 for
dnl # mail from MUAs that authenticate. Roaming users who can't reach their
dnl # preferred sendmail daemon due to port 25 being blocked or redirected
dnl find
dnl # this useful.
dnl #
dnl DAEMON_OPTIONS(`Port=submission, Name=MSA, M=Ea')dnl
dnl #
dnl # The following causes sendmail to additionally listen to port 465, but
dnl # starting immediately in TLS mode upon connecting. Port 25 or 587
dnl followed
dnl # by STARTTLS is preferred, but roaming clients using Outlook Express
Install Tools Remind Me Later Never Remind Me
he virtual screen | VMware Tools enables many features and improves mouse movement, video and performance. Log in to the guest operating system and click "Install Tools".
9:52 AM
ENG IN 9/15/2025
```

```
m4 /etc/mail/sendmail.mc > /etc/mail/sendmail.cf
```

```
[root@server Packages]# rpm -ivh sendmail-
sendmail-8.14.4-8.el6.i686.rpm      sendmail-cf-8.14.4-8.el6.noarch.rpm
[root@server Packages]# rpm -ivh sendmail-cf-8.14.4-8.el6.noarch.rpm
warning: sendmail-cf-8.14.4-8.el6.noarch.rpm: Header V3 RSA/SHA256 Signature, key ID fd431d51: NOK
EY
Preparing...                                           #### [100%]
 1:sendmail-cf                                     #### [100%]
[root@server Packages]# m4 /etc/mail/sendmail.mc > /etc/mail/sendmail.cf
[root@server Packages]#
```



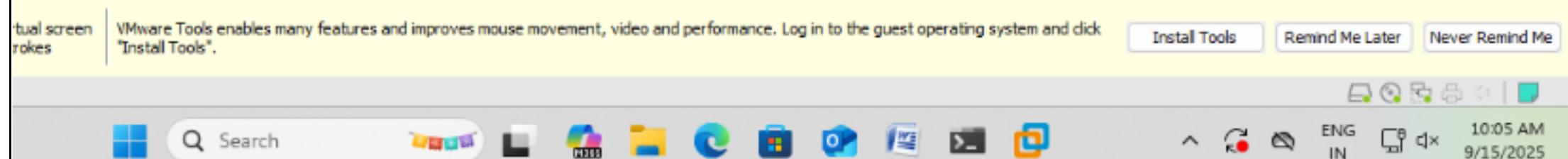
service named start

service sendmail start

dig server.tyit.com

```
[root@server Packages]# service named start
Starting named:                                         [ OK ]
[root@server Packages]# service sendmail start
Starting sendmail:                                       [ OK ]
Starting sm-client:                                      [ OK ]
[root@server Packages]# dig server.tyit.com

; <>> DiG 9.7.3-RedHat-9.7.3-2.el6 <>> server.tyit.com
;; global options: +cmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: SERVFAIL, id: 42873
;; flags: qr rd ra; QUERY: 1, ANSWER: 0, AUTHORITY: 0, ADDITIONAL: 0
;; QUESTION SECTION:
;server.tyit.com.          IN      A
;; Query time: 1 msec
;; SERVER: 192.168.1.3#53(192.168.1.3)
;; WHEN: Mon Sep 15 10:02:38 2025
```



cd /root

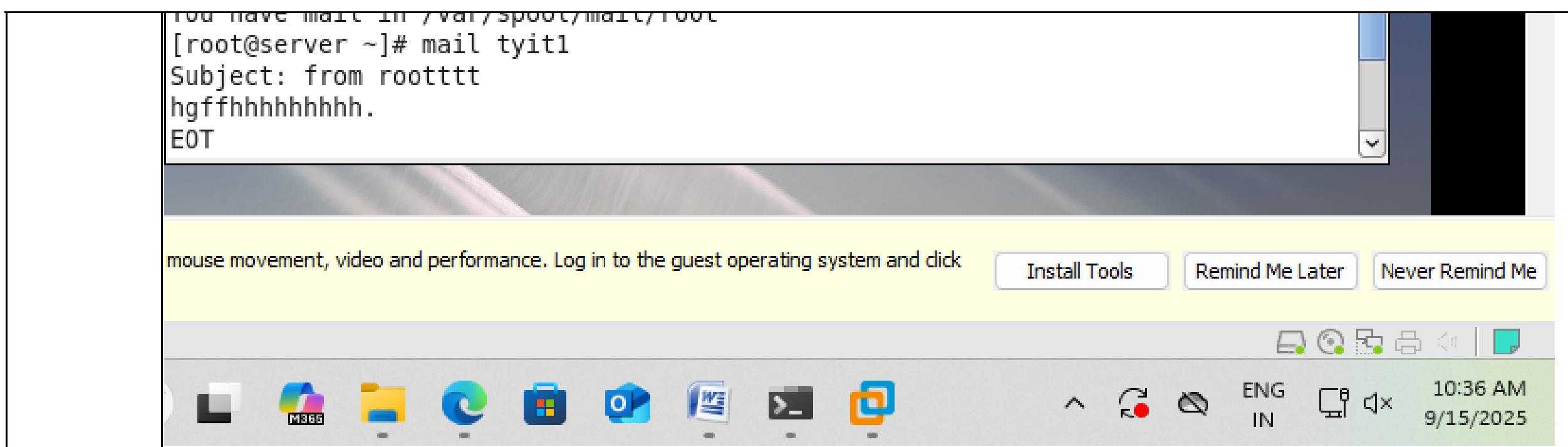
Now we will send the mail from root to tyit1

```
[root@server /]# mail tyit1
```

Subject : heiww

Body part.

Cntrl + D x2

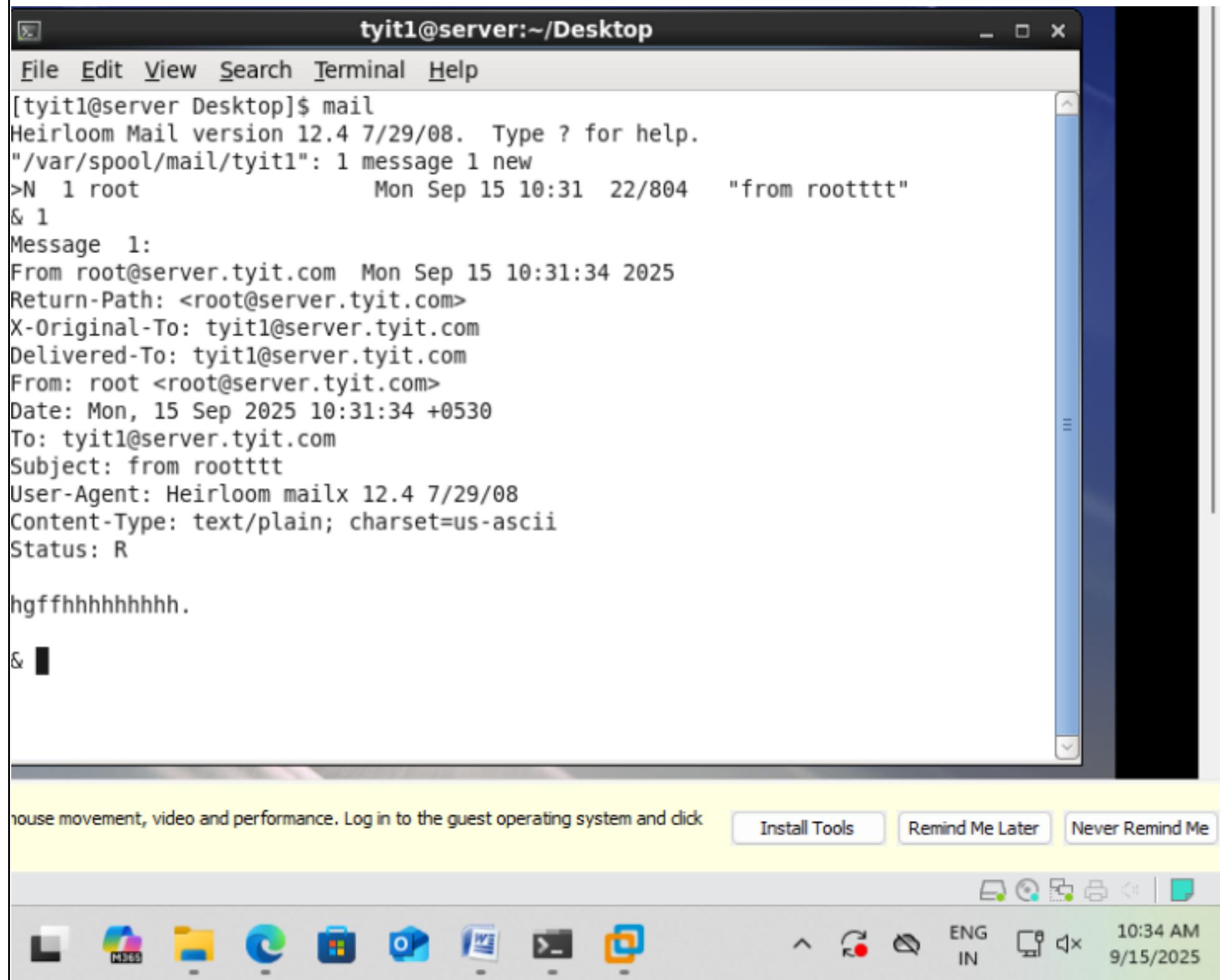


Now , login to tyit1

Open cmd -> Type

mail

the mail sent by the root user is shown here




## K.E.T'S V.G.VAZE COLLEGE

**ROLL NO:A051**

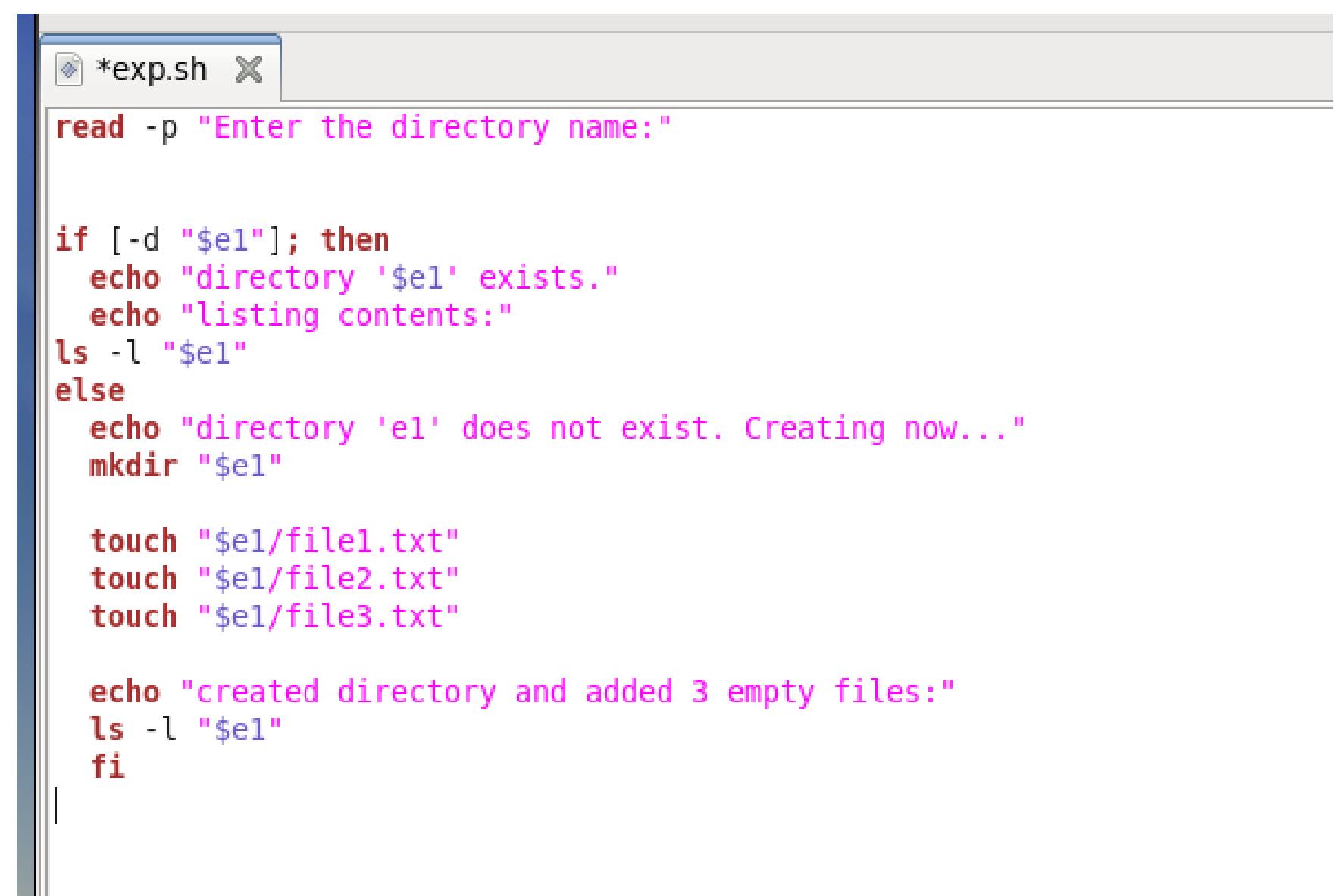
**NAME: Mrunali.S.Walekar**

### **PRACTICAL 8**

<b>PRACTICAL 8</b>	<b>Shell Scripts</b>
<b>8A</b>	<p><b>Writing shell scripts</b></p> <p><b>1.</b> Write a shell script that will accept directory name if the directory does not exist create a directory create 3 empty files in that directory. If the directory exists list the content of directory</p> <pre style="background-color: #f0f0f0; padding: 10px;"> read -p "Enter the directory name:"   if [-d "\$e1"]; then   echo "directory '\$e1' exists."   echo "listing contents:"   ls -l "\$e1" else   echo "directory 'e1' does not exist. Creating now..."   mkdir "\$e1"    touch "\$e1/file1.txt"   touch "\$e1/file2.txt"   touch "\$e1/file3.txt"    echo "created directory and added 3 empty files:"   ls -l "\$e1" fi </pre> <p><b>2.</b> Write a shell script for process management with the following menu:</p> <ul style="list-style-type: none"> <li>- List the name currently logged in users</li> </ul>

- Check the group which the current user belongs to
- View the active process
- Find the info of process like (-pid,user,owner,pty,etc)
- 

File Edit View Search Terminal Help  
 [root@server Desktop]# nano sec.sh

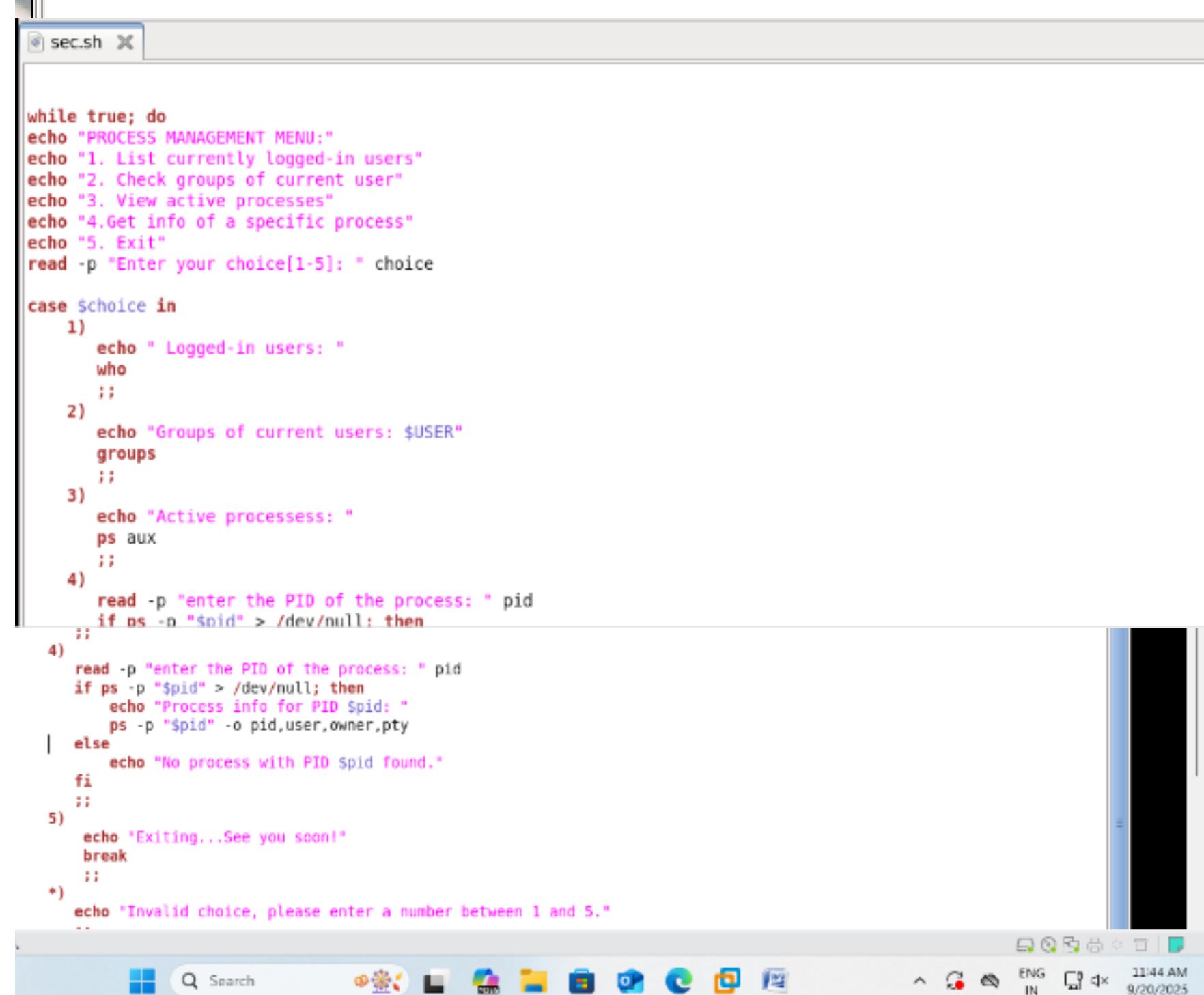


```
*exp.sh X
read -p "Enter the directory name:" e1

if [-d "$e1"]; then
  echo "directory '$e1' exists."
  echo "listing contents:"
  ls -l "$e1"
else
  echo "directory 'e1' does not exist. Creating now..."
  mkdir "$e1"

  touch "$e1/file1.txt"
  touch "$e1/file2.txt"
  touch "$e1/file3.txt"

  echo "created directory and added 3 empty files:"
  ls -l "$e1"
fi
```

```
sec.sh X
while true; do
  echo "PROCESS MANAGEMENT MENU:"
  echo "1. List currently logged-in users"
  echo "2. Check groups of current user"
  echo "3. View active processes"
  echo "4. Get info of a specific process"
  echo "5. Exit"
  read -p "Enter your choice[1-5]: " choice

  case choice in
    1)
      echo " Logged-in users: "
      who
      ;;
    2)
      echo "Groups of current users: $USER"
      groups
      ;;
    3)
      echo "Active processes: "
      ps aux
      ;;
    4)
      read -p "enter the PID of the process: " pid
      if ps -o "sPid" > /dev/null; then
        ;;
      else
        echo "No process with PID Spid found."
        fi
      ;;
    5)
      echo "Exiting...See you soon!"
      break
      ;;
    *)
      echo "Invalid choice, please enter a number between 1 and 5."
      ;;
  esac
done
```

```

    t1
    ;;
5) echo "Exiting...See you soon!"
break
;;
*)
echo "Invalid choice, please enter a number between 1 and 5."
;;
esac
echo ""
done

```

sh ▾ Tab Width: 8 ▾ Ln 37, Col 11 IN

```

[root@server Desktop]# ./sec.sh
PROCESS MANAGEMENT MENU:
1. List currently logged-in users
2. Check groups of current user
3. View active processes
4. Get info of a specific process
5. Exit
Enter your choice[1-5]: 1
Logged-in users:
root      tty1          2025-09-20 11:24 (:0)
root      pts/0          2025-09-20 11:24 (:0.0)

PROCESS MANAGEMENT MENU:
1. List currently logged-in users
2. Check groups of current user
3. View active processes
PROCESS MANAGEMENT MENU:
1. List currently logged-in users
2. Check groups of current user
3. View active processes
4. Get info of a specific process
5. Exit
Enter your choice[1-5]: 2
Groups of current users: root
root bin daemon sys adm disk wheel

PROCESS MANAGEMENT MENU:
1. List currently logged-in users
2. Check groups of current user
3. View active processes
4. Get info of a specific process
5. Exit
Enter your choice[1-5]: 3
Active processes:
USER      PID %CPU %MEM    VSZ   RSS TTY      STAT START  TIME COMMAND
root      1  0.0  0.0    2852  1416 ?      Ss  11:21  0:01 /sbin/init
root      2  0.0  0.0      0     0 ?      S  11:21  0:00 [kthreadd]
root      3  0.0  0.0      0     0 ?      S  11:21  0:00 [migration/0]

PROCESS MANAGEMENT MENU:
1. List currently logged-in users
2. Check groups of current user
3. View active processes
4. Get info of a specific process
5. Exit
Enter your choice[1-5]: 4
enter the PID of the process: 5
Process info for PID 5:
ERROR: Unknown user-defined format specifier "owner".
***** simple selection ***** selection by list *****
-A all processes           -C by command name
-N negate selection         -G by real group ID (supports names)
-a all w/ tty except session leaders -U by real user ID (supports names)
-d all except session leaders -g by session OR by effective group name
-e all processes            -p by process ID
-T all processes on this terminal -s processes in the sessions given
-a all w/ tty, including other users -t by tty
-g OBSOLETE -- DO NOT USE   -u by effective user ID (supports names)
-r only running processes   -U processes for specified users
-x processes w/o controlling ttys -t by tty
***** output format ***** long options *****

```

	<pre> PROCESS MANAGEMENT MENU: 1. List currently logged-in users 2. Check groups of current user 3. View active processes 4. Get info of a specific process 5. Exit Enter your choice[1-5]: ■ </pre>
	<p><b>3. Write a shell script for directory management with the following menu:</b></p> <ul style="list-style-type: none"> <li><b>-create directory (mkdir)</b></li> <li><b>- rename directory</b></li> <li><b>- copy directory</b></li> <li><b>- list the content of directory</b></li> <li><b>- change the directory</b></li> <li><b>- exit the directory</b></li> </ul>
<b>8B</b>	