1) go to browser and search oracale vmware virtualbox

2) click on windows host it will download virtual machine automatically

3) double click on exe file and next

4) click on next

5) click on yes and then install

6) after installing click on finish

1) Install REDHAT iso file from there official website

2) Open virtual box & click on new then choose type as linux and version as redhat

3) click on next

4) click on next

5) click on finish

6) machine->left click->setting->storage->(Select empty disk and load REDHAT iso file on it)

7)start the machine

8)select language

9)after succesful installation click on reboot system

//Practical 1 Graphical user interface $ command Line Interface and process

a)Exploring the Graphical Desktp

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b) command line interface

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ls =list all files and folders

cd =change directory

cd .. =gets to normal directory

pwd = shows present working directory

touch = creates a file

cat = insert any content in the file

cat > = override file content if its there and writes it

cat >> =dosent override continue to add content

mv =move file content

cp =copy content of file

mkdir =create a new directory

rmdir =deletes a directory

clear =clears everything

man man = displays something

help pwd = more information on pwd

c)Managing process

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

top =display all foreground and background process

ps = process status

ps -u = displays something

ps -a = displays something

sleep 100 & = machine sleeps

nice -n 10 sleep 100 = sets priority

renice -n 10 -p = change the priority of process

states of process

'D' = uninterruptible sleep

'R' =running

'S' =sleeping

'T' =traced or stopped

'Z' =Zombie

//Practical 2 Storage devies and links ,backups & rpeository

a)working with storage devices and links

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1) lsblk -a =Lsblk command is used to display details about block devices

2) sudo parted -l =allows you to easily manage hard disk partitions

3) sudo fdisk -l = creation and manipulation of partition tables

Extra - Mounting and Unmounting

1) df -h

2) unmount /root/Demo

df -h

b)Making a backup

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1) touch file1 file2 file3

ls

tar -cf ok.tar file1 file2 file3

ls

cat ok.tar

c)creating a repository

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1) install createrepo utility

sudo yum install createrepo

2) create a repository directory

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

mkdir data

ls

3)create the repository metadata

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

createrepo data

ls

cd data

ls

//Practical 3 working with RPM's storage and networking

a)using query option

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1)How to check an rpm signature

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm --checksig sqlbuddy-1.3.3-1.noarch.rpm

2)How to install an RPM package

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

wget https:// www.erikjacobs.com/stuff/sqlbuddy-1.3.3-1.noarch.rpm

3)How to check dependencies of RPM package before installing

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -qpR sqlbuddy-1.3.3-1.noarch.rpm

4)How to install rpm packages without dependencies

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -i--nodeps sqlbuddy-1.3.3-1.noarch.rpm

5)How to check an Installed RPM package

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -q sqlbuddy

6)How to list all files of an installed RPM package

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rpm -ql sqlbuddy

7)How to list recently installed RPM packages

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -qa--last

8)List all installed RPM packages

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -- qa

9)Upgrade RPM package

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -Uvh --nodeps sqlbuddy-1.3.3-1.noarch.rpm

10)Remove a RPM package

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -e -nodeps sqlbuddy

11)Remove au RPM package without dependencies

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -evv -nodeps sqlbuddy

12)Query a file that belongs to RPM packages

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -qf /root

13)Query a information of installed RPM package

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -qi sqlbuddy

14)Get information of RPM package before installing

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -qip sqlbuddy-1.3.3-1.noarch.rpm

15)Query documentation of Installed RPM package

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -gdf / ust/bin/vmstat

16)Verify RPM package

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -Vp sqlbuddy-1.3.3-1.noarch.rpm

17) verify all RPM packages

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

rpm -Va --nodeps

b)Extracting File from RPM's

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

//Practical 4 Working with users groups and permissions

1) create a file

touch filename

2)view the file permissions

ls -l filename

3)to give all permission to everything

chmod 777 filename

4)add a user

adduser shaunak

5)add a group

groupadd shaun

6)change the user

chwon shaunak filename

7)change the group

chown shaunak:shaun filename

8)change the permissions for user

chmod u-r filename

chmod g-w filename

chmod o-x filename

chmod u+r filename

chmod g+w filename

chmod o+x filename

//Practical 4 Working with users groups and permissions

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chmod u-r filename

chmod g-w filename

chmod o-x filename

chmod u+r filename

chmod g+w filename

chmod o+x filename

//practical 6 Samba steps

configure FTP server

setting up file share through samba

configure SELinux

configure samba share

save file and test

create user with password for private samba

enable service at bootime

check status for samba services

for samba server to work enable samba services in firewall config application

samba client access

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

visit any client machine and install samba packages

access the shared directory from samba server

mount samba share

//Practical 7 dns dhscp mail server

a)DNS

hostnamectl

ifconfig

yum search bind

yum -y install bind bind-utils

vi/etc/named.conf

systemctl start named

systemctl enable named

systemctl status named

/var/example.com.db

b)DHCP

yum install dhcp\*

/etc/dhcp/dhcpd.conf

systemctl restart dhcpd

vi/etc/sysconfig/network-script/ifcgf-eth0BOOTPROTO=dhcp

systemctl restart network

c)mail server

yum install postfix -y

/etc/postfix/main.cf

systemctl restart postfix

systemctl enable postfix

firewall-cmd --permanent -add service=smtp

firewall-cmd --reload

firewall-cmd --list-services

whoami

yum -y install mailx