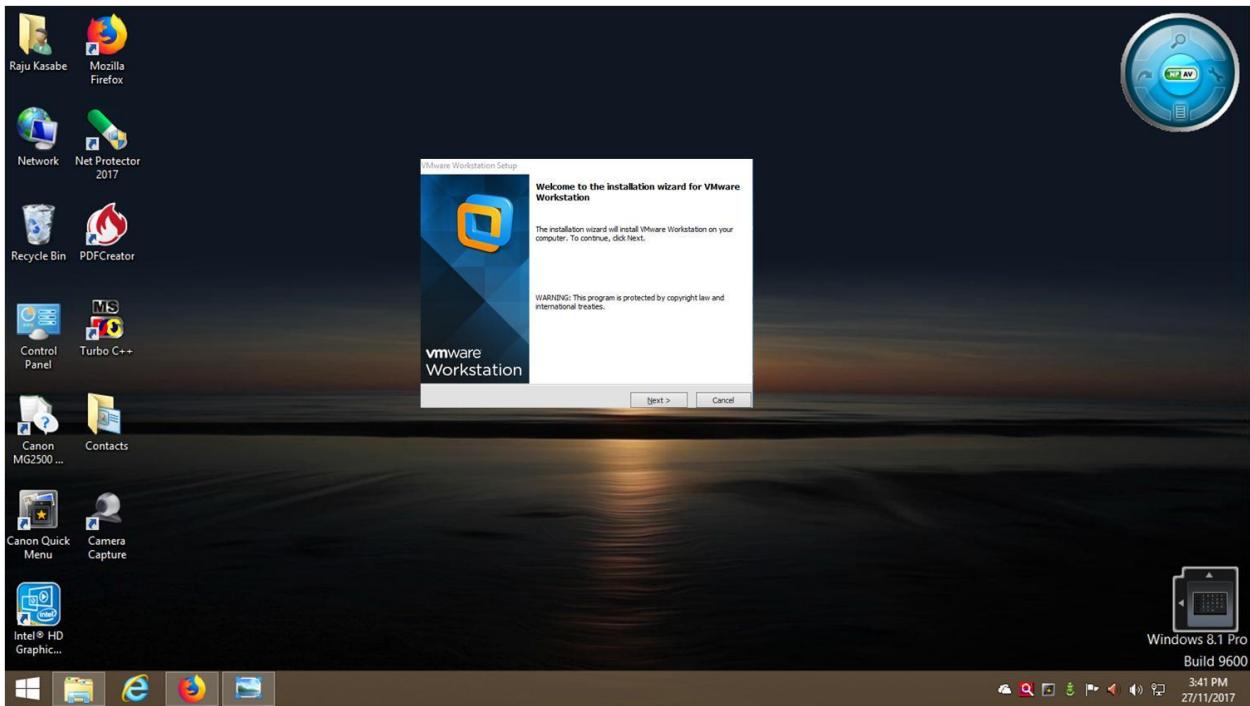


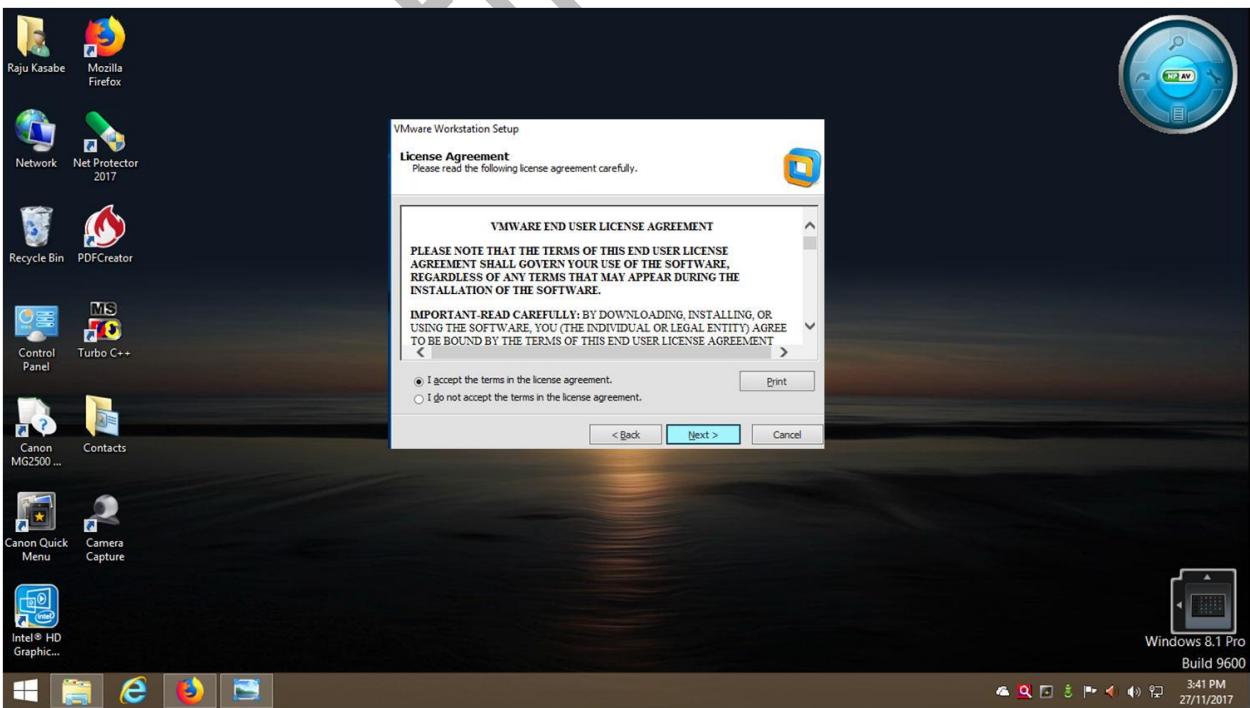
PRACTICAL NO.1

Aim: Installation of Virtual Machine Software.

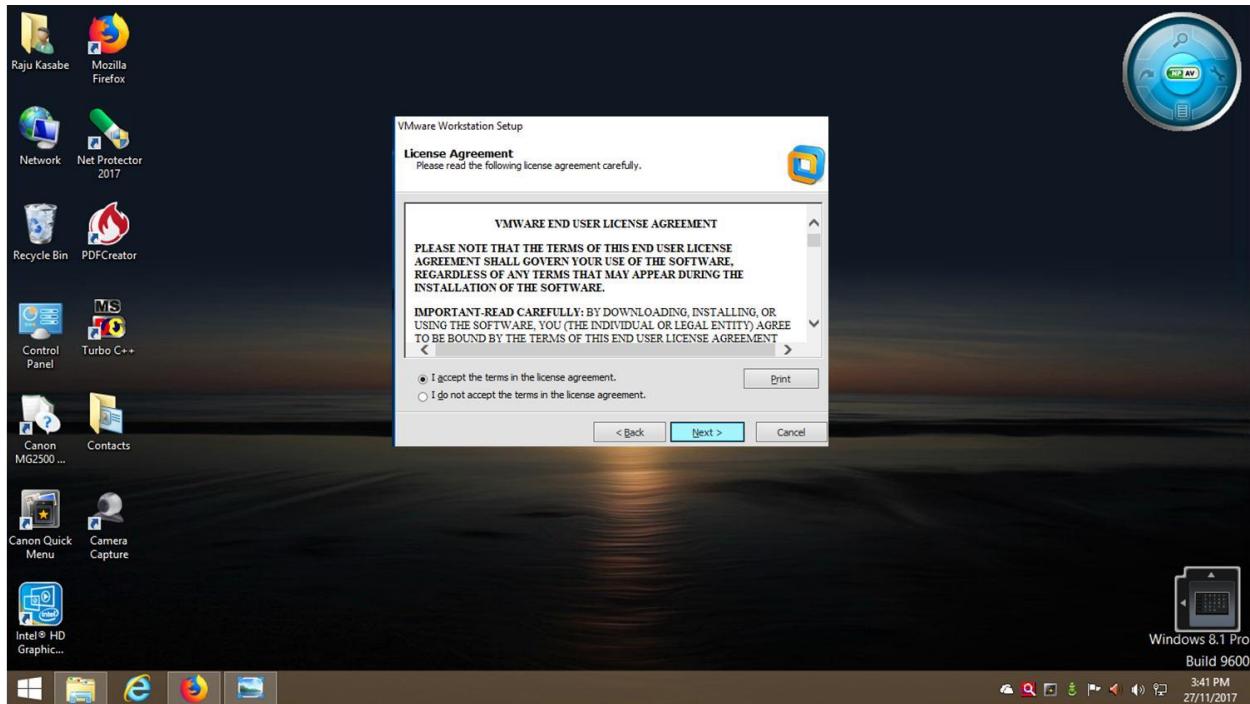
Step1: Open VMWare Installation Software.



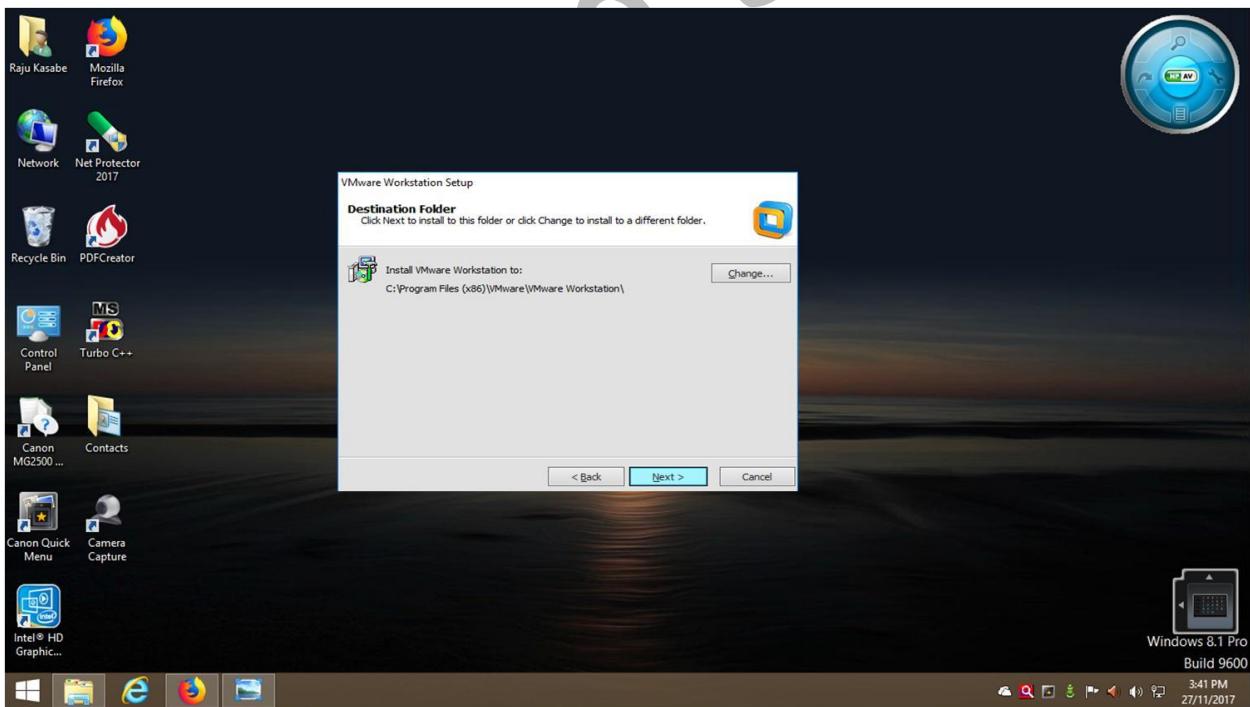
Step2: Click next.



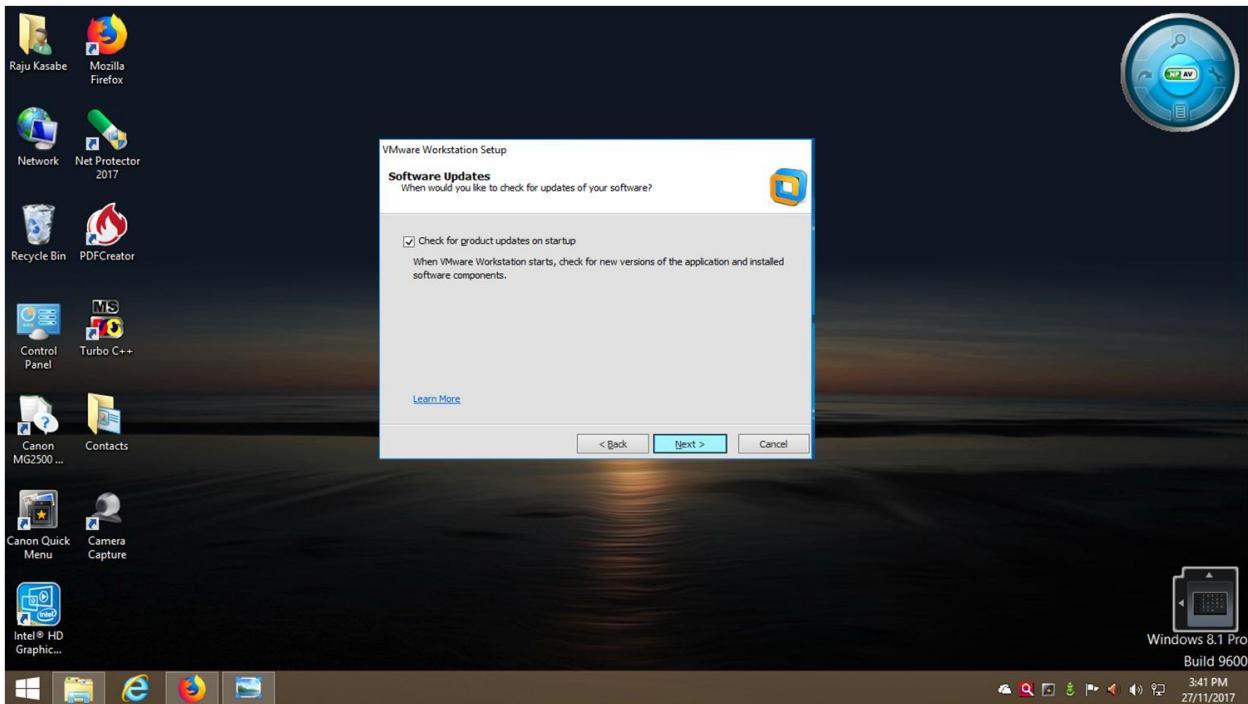
Step3: Select typical and next.



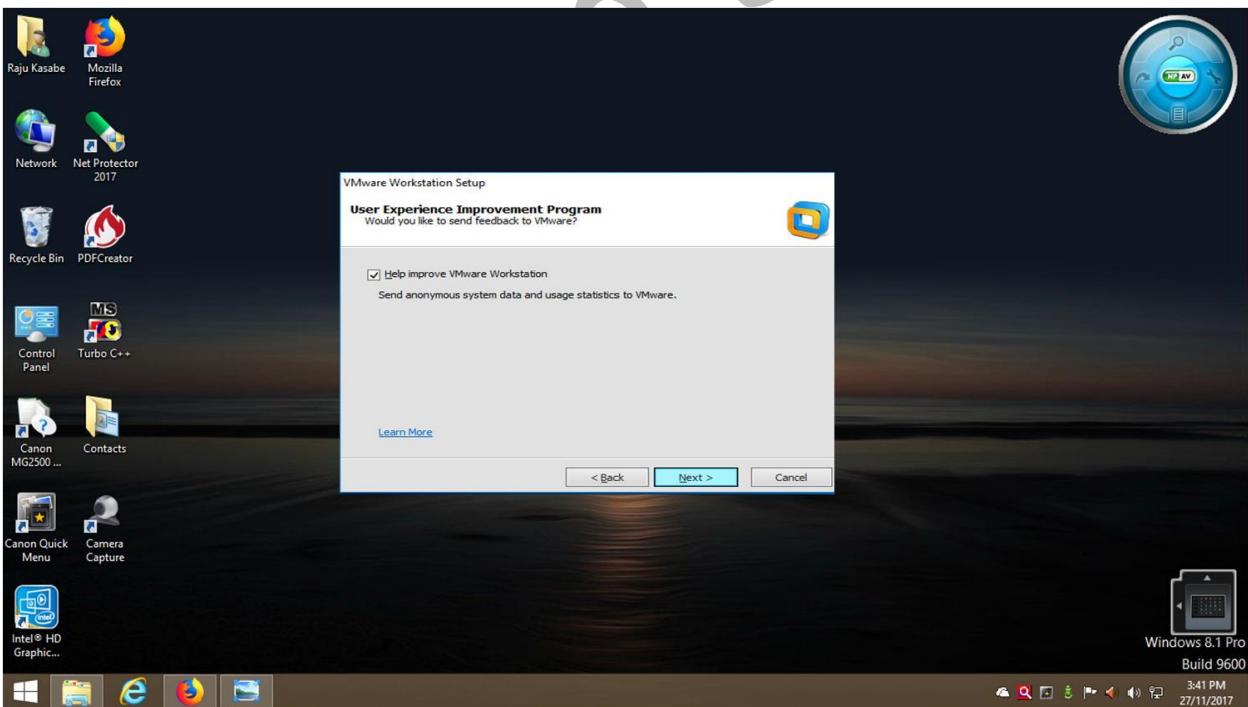
Step4: Select next.



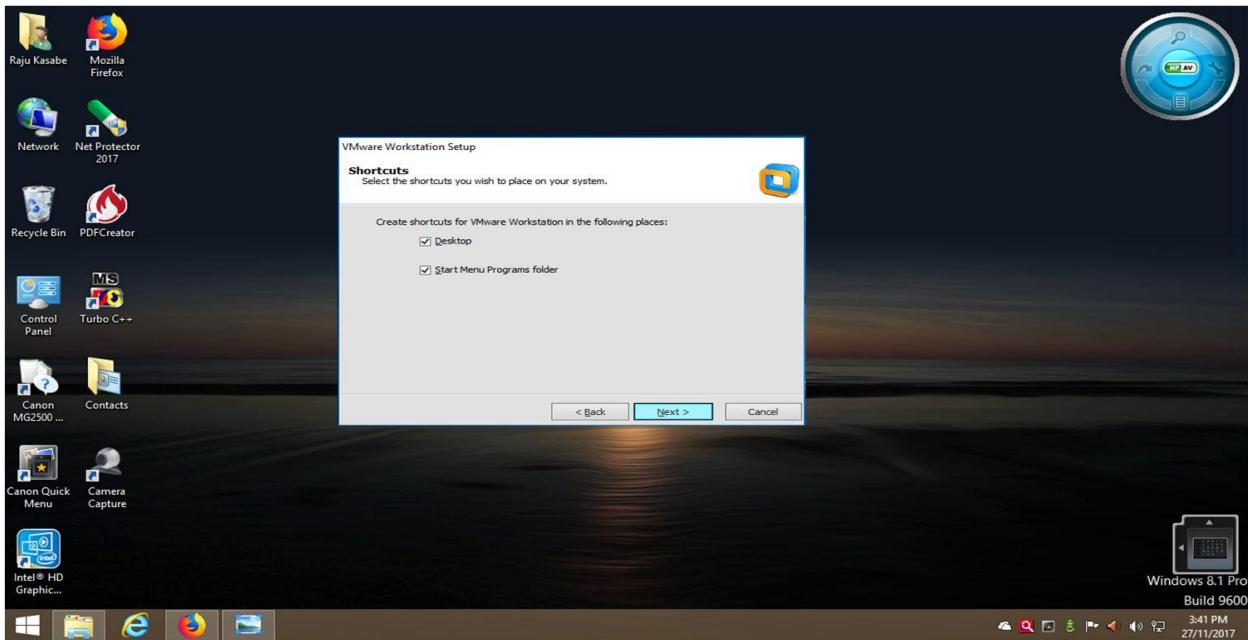
Step5: Select next.



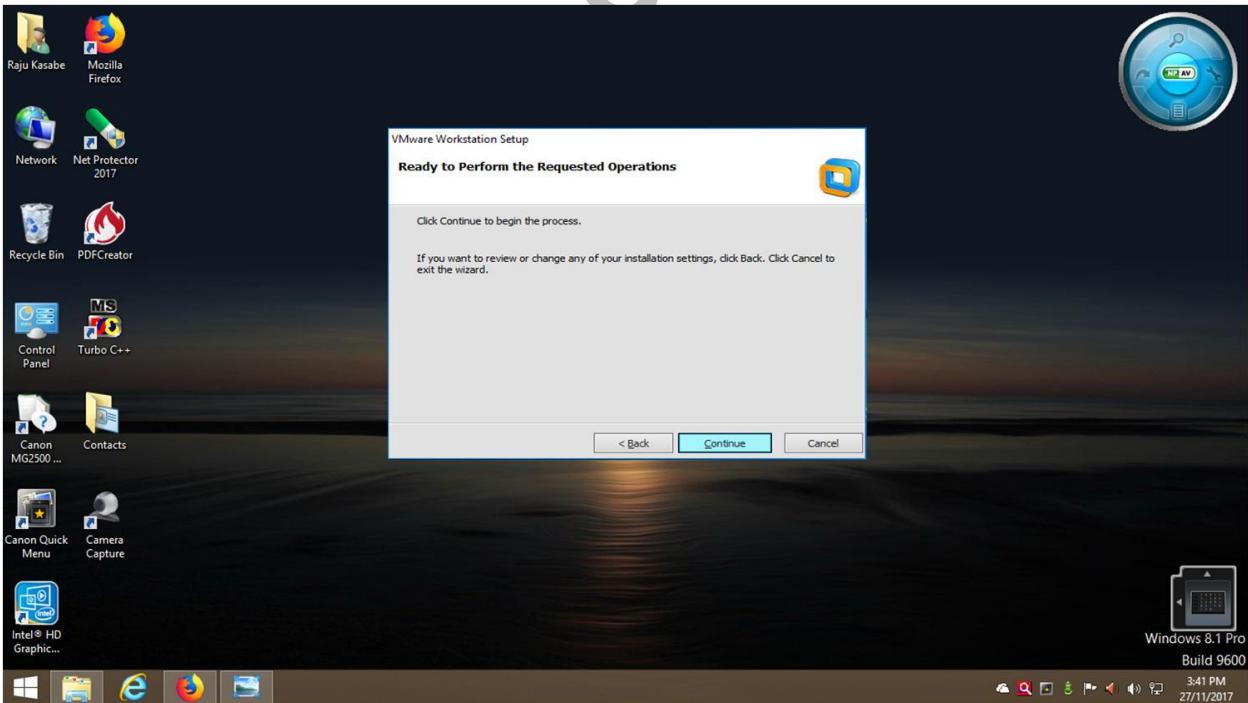
Step6: Click install.

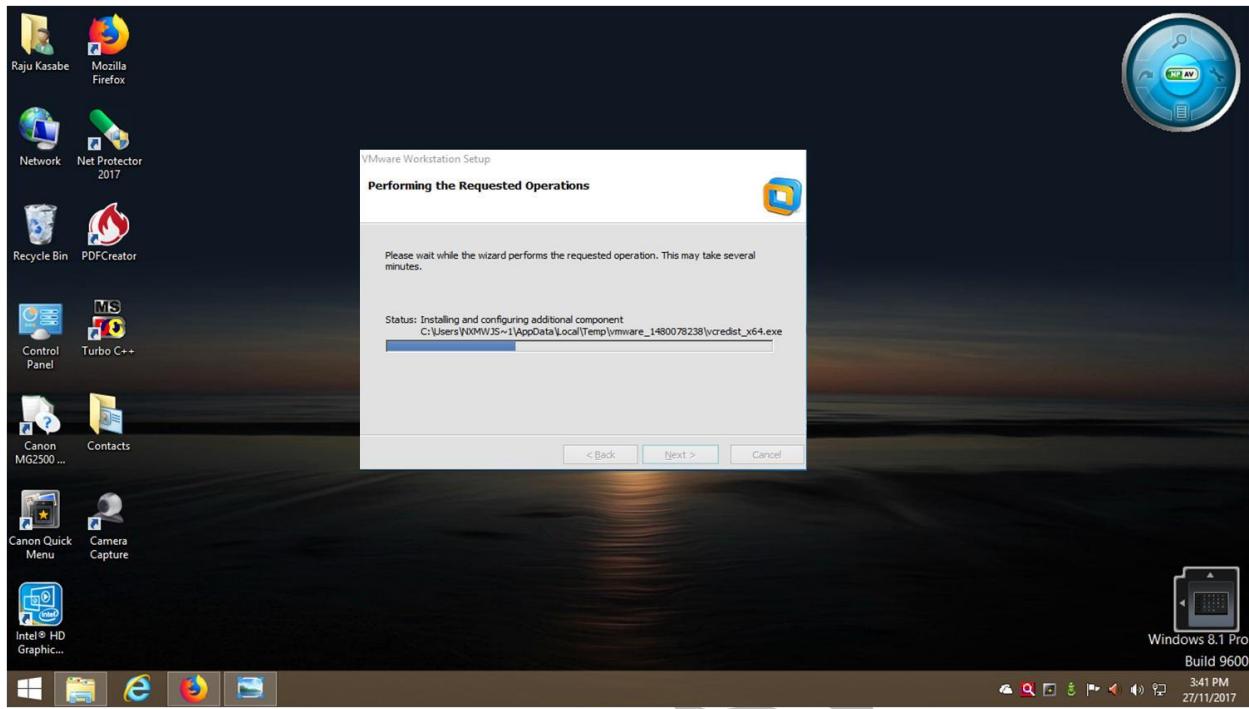


Step7: Wait forth installer to install the VMWare.

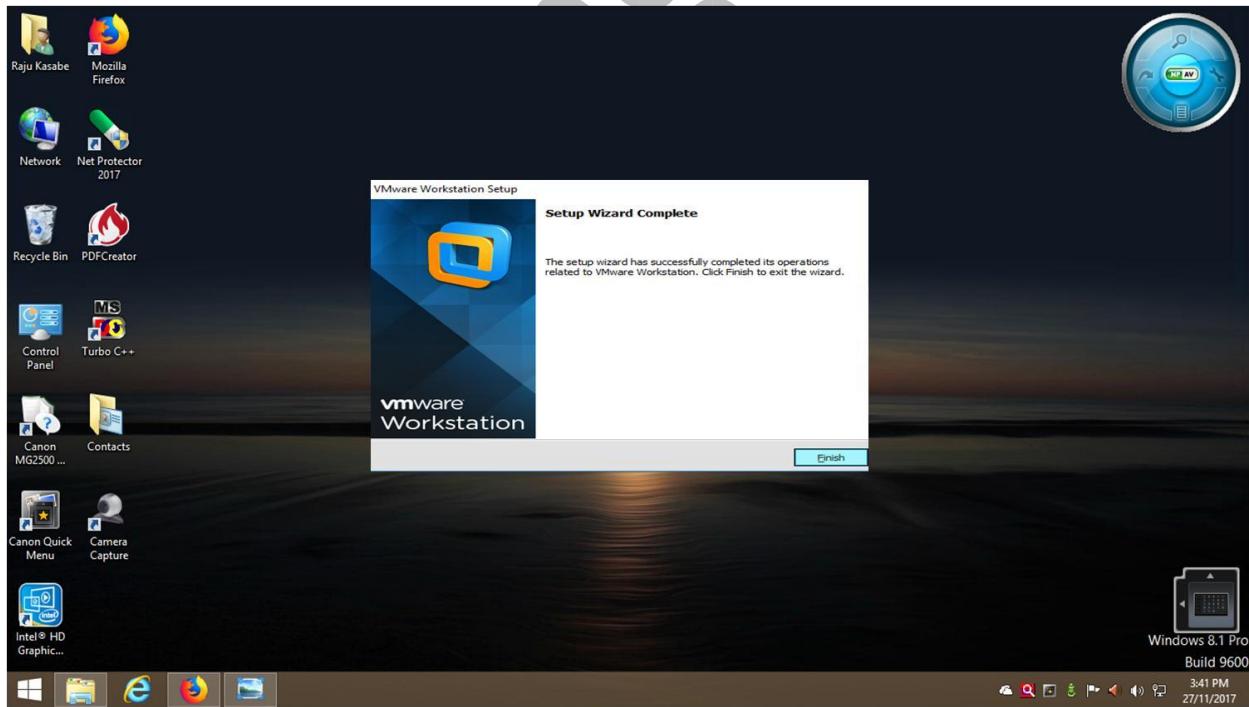


Step8: VMWare Software installer will ask Username and Serial number, provide Username and Serial number.And then click on Continue

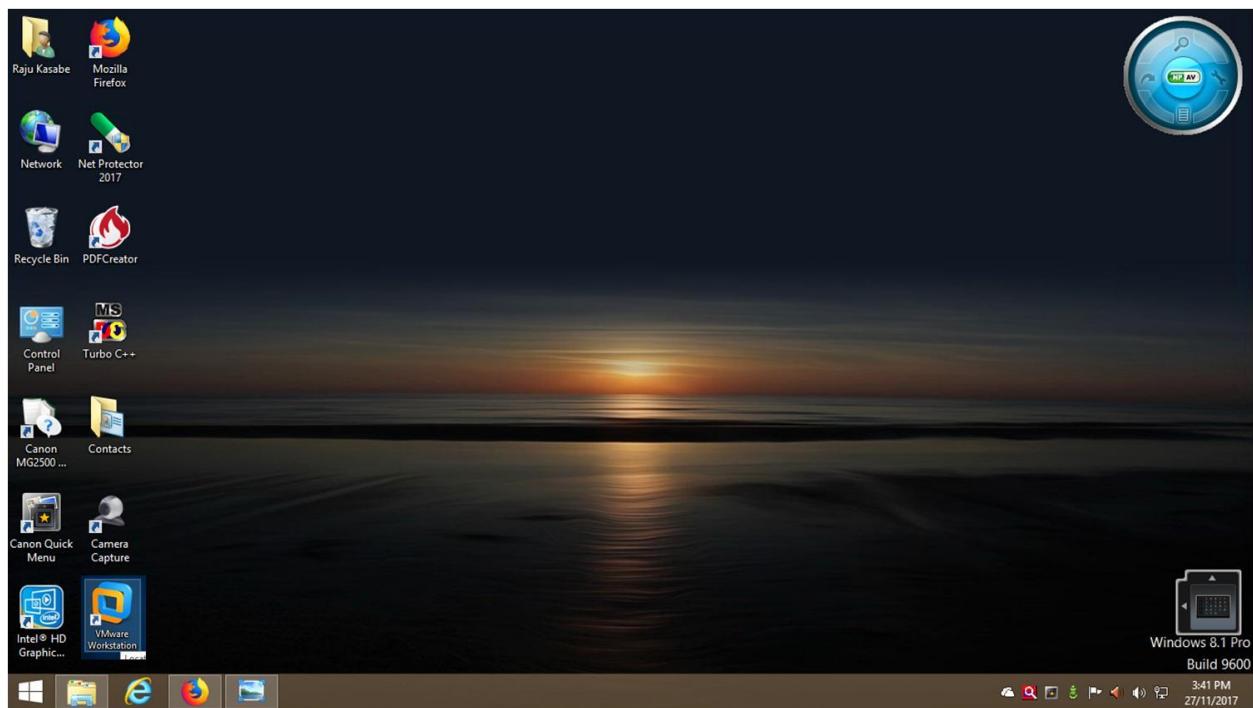




Step9: The installer will say Installation Wizard Completed of VMWare Software. Then click on Finish



Step10:After restarting the PC VMWare Software is completely install.

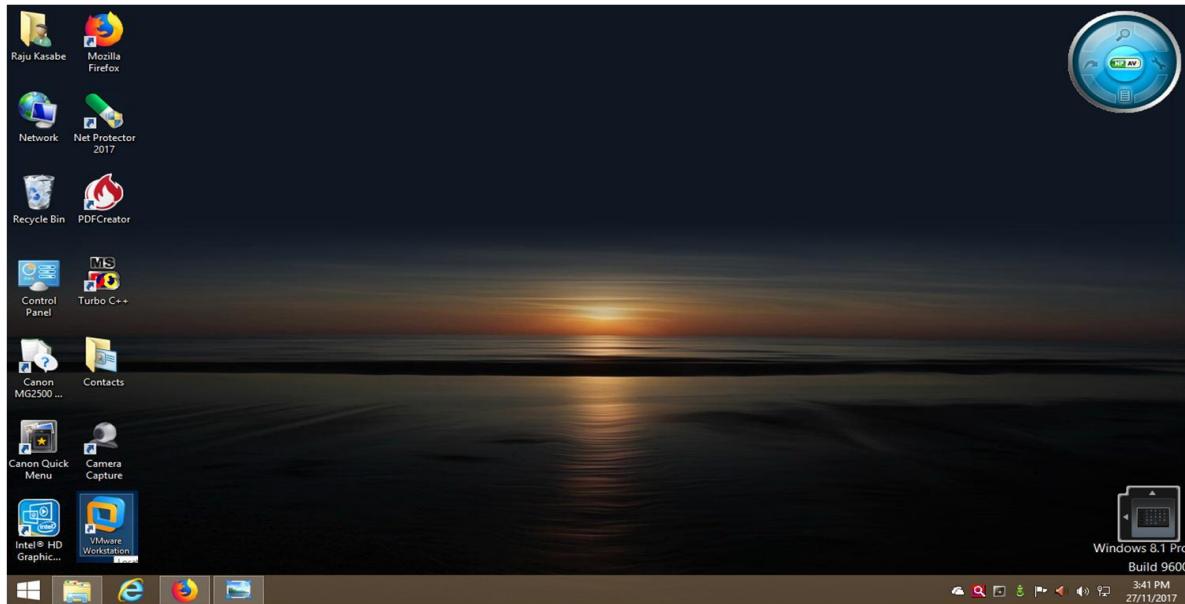


Operating System

PRACTICALNO.2

Aim: Installation of Linux Operating System (Redhat/Ubuntu) on Virtual Machine.

Step1: To install Linux Operating System on Virtual Machine open VMware Workstation.



Step2: VMware Workstation will open.

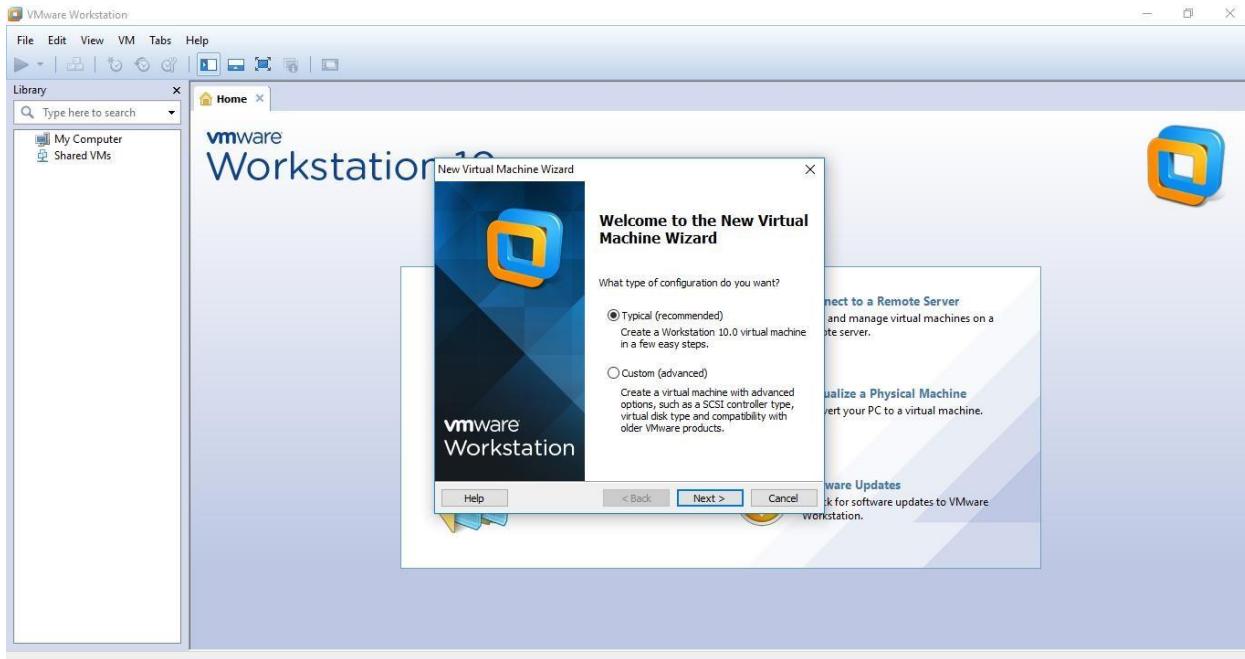
Whenever you open VMware Workstation it will provide you with useful tips, after reading tips tap on close.



Step3: Select file from the top left handside.



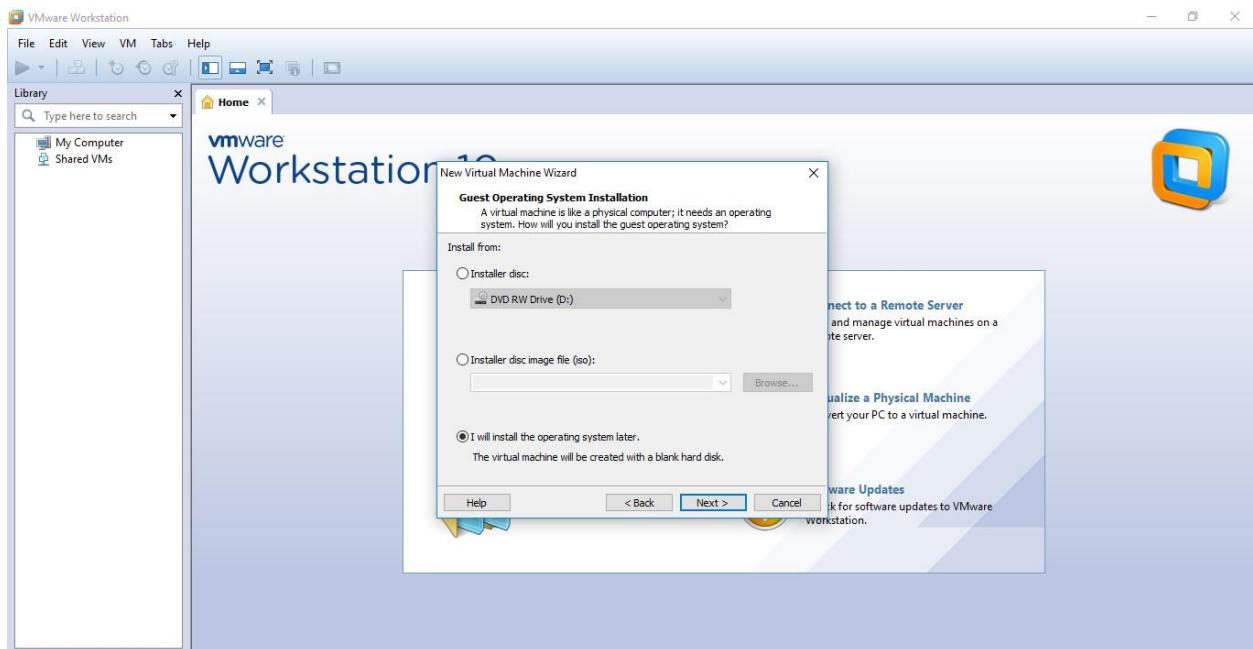
Step4:Then click on New Virtual Machine. OR Press Ctrl+N on keyboard.



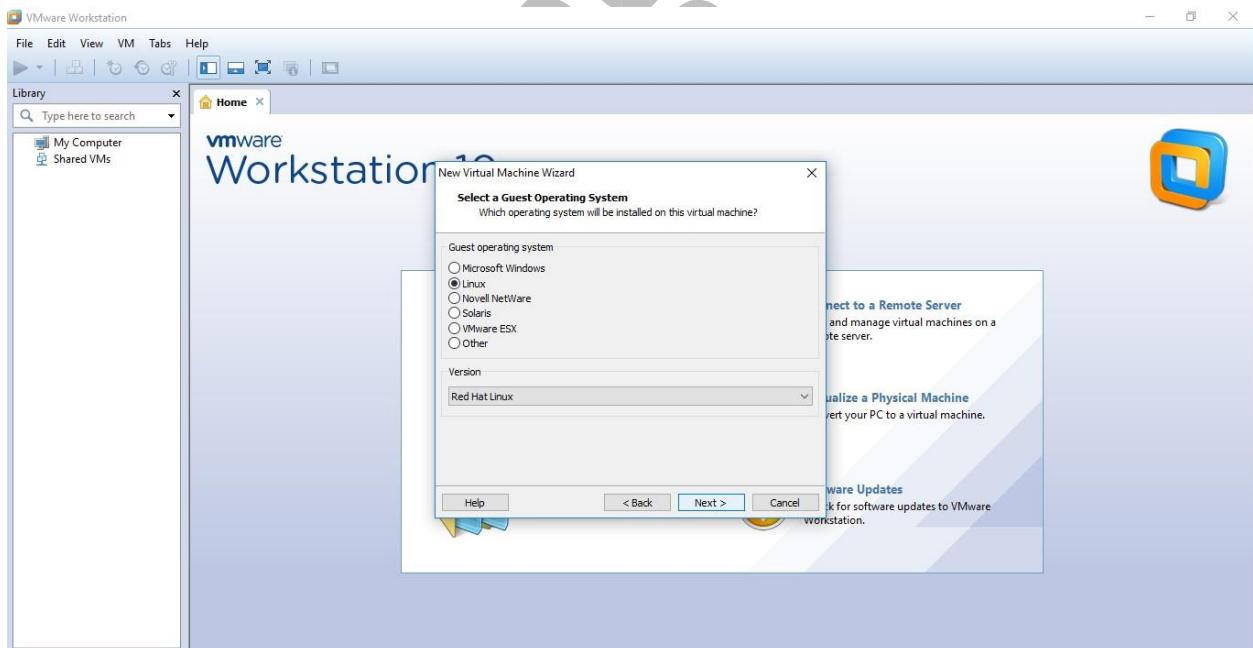
Step5:A new dialogue box will appear to install Virtual Machine and click on Next.



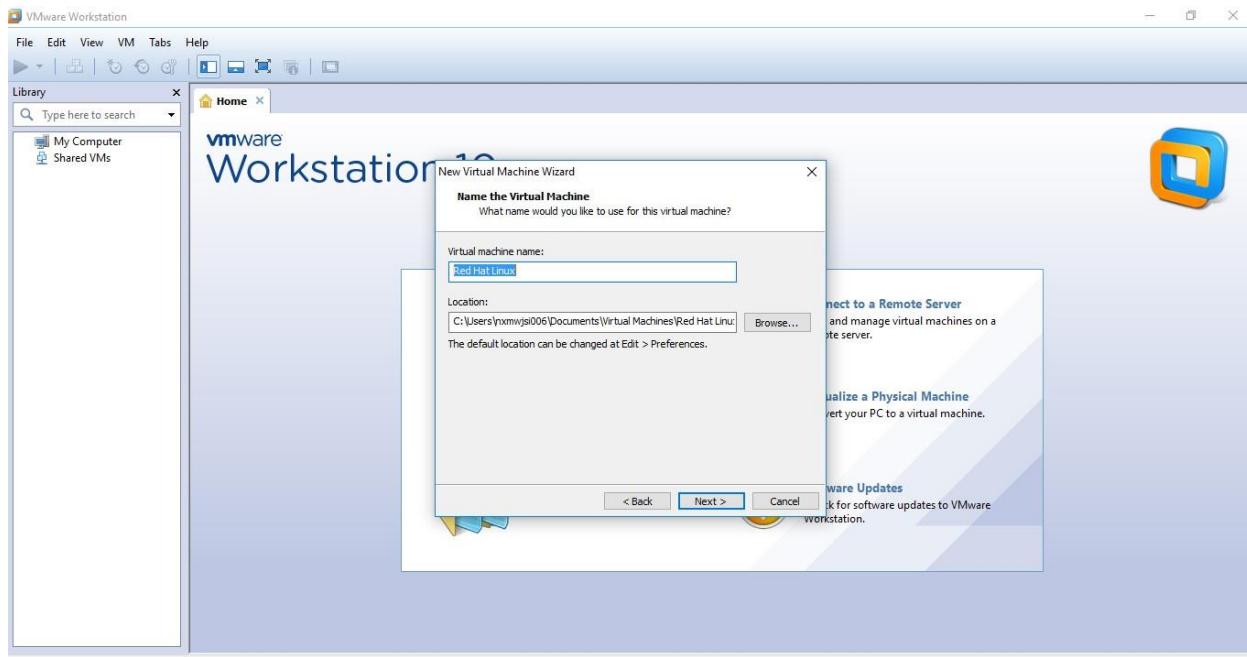
Step6: Select Typical and click on Next.



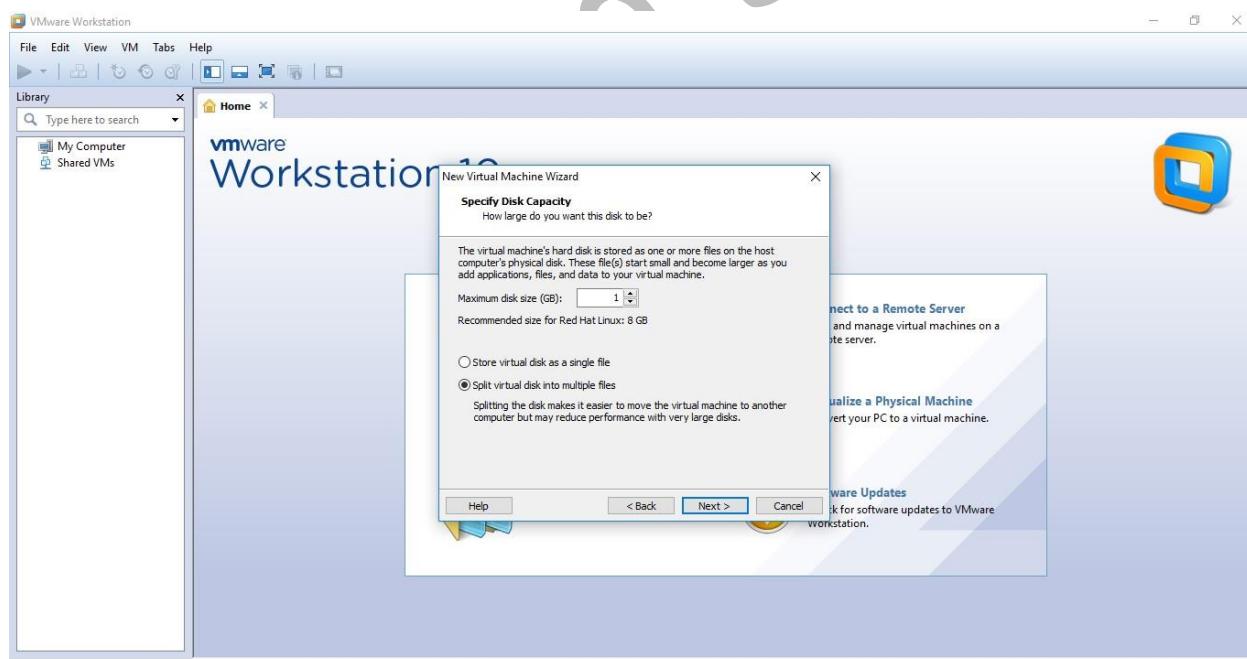
Step7: In that select Linux and then select the version Red Hat Linux and then click on Next.



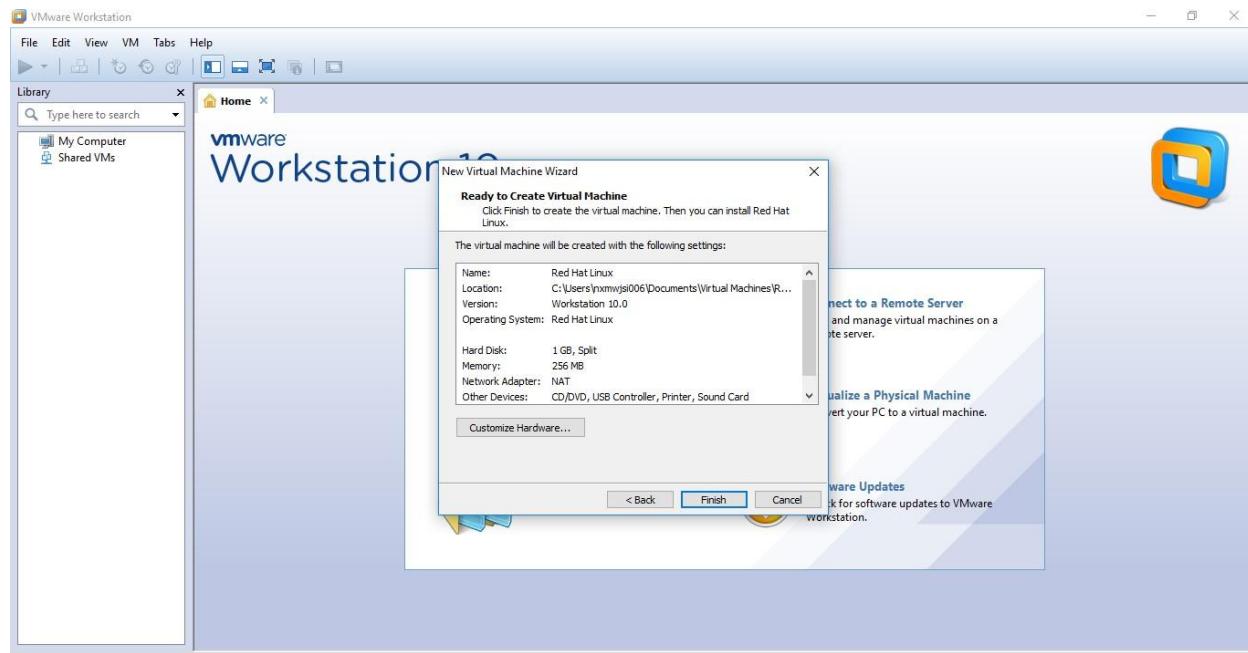
Step8: Give name to your Virtual Machine and give location then click on Next.



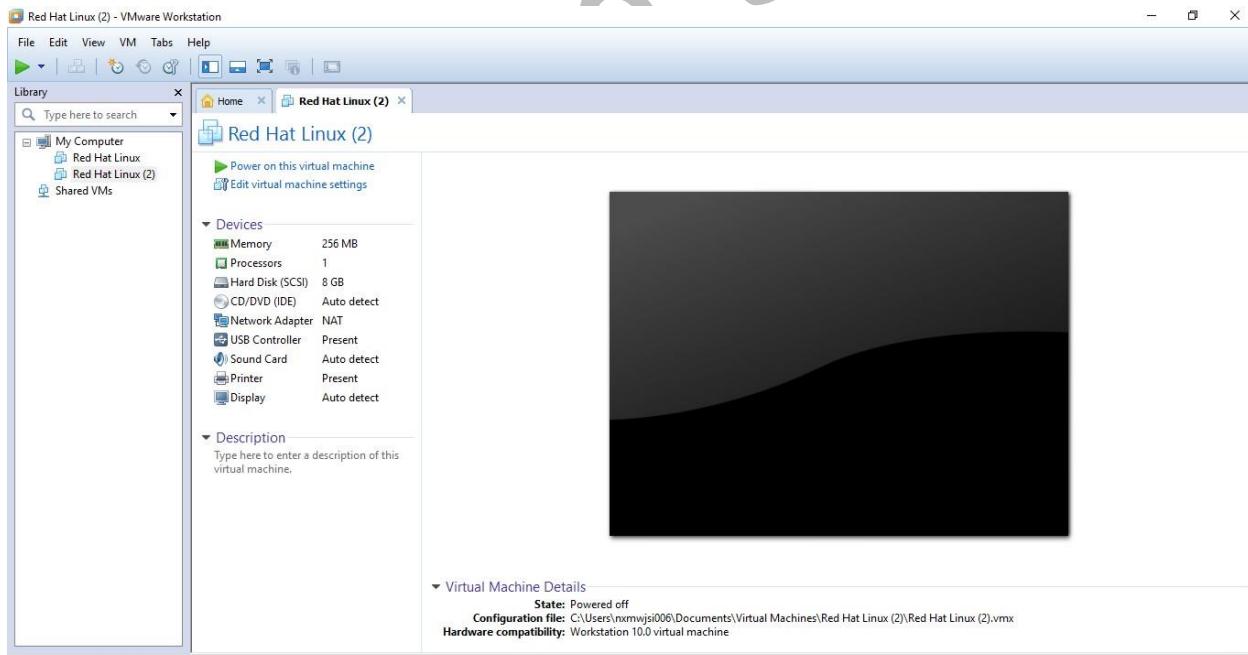
Step9: Select Do not use network connection and then click on Next.



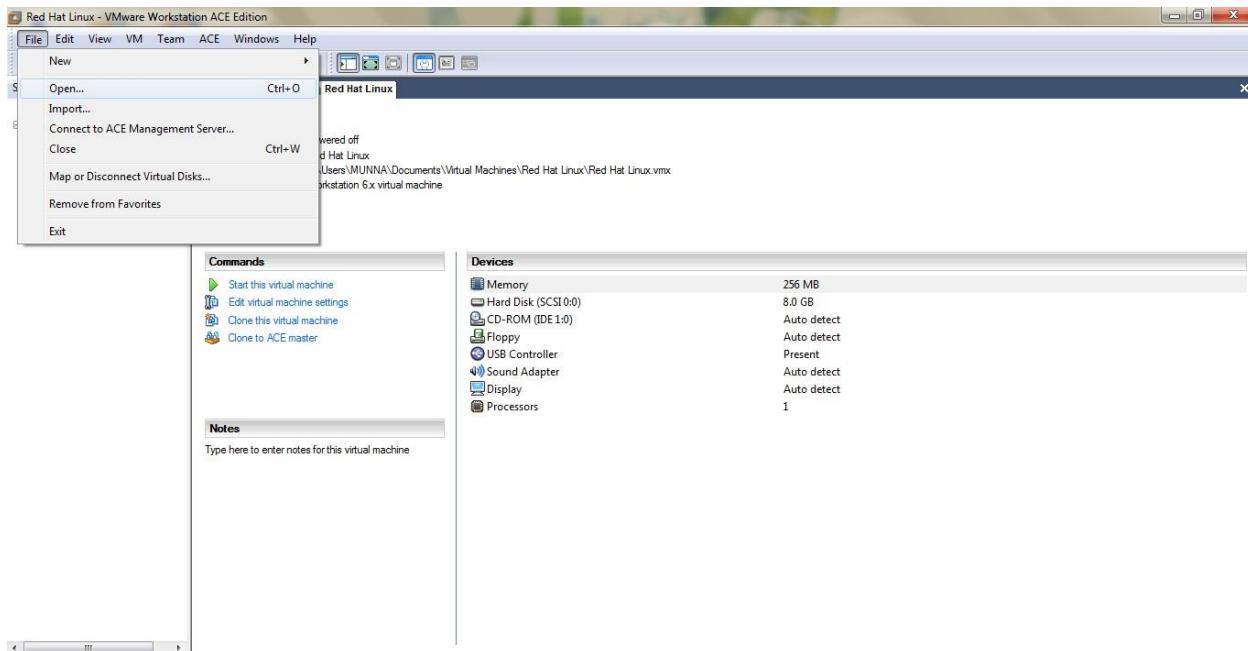
Step10:Click on Finish.



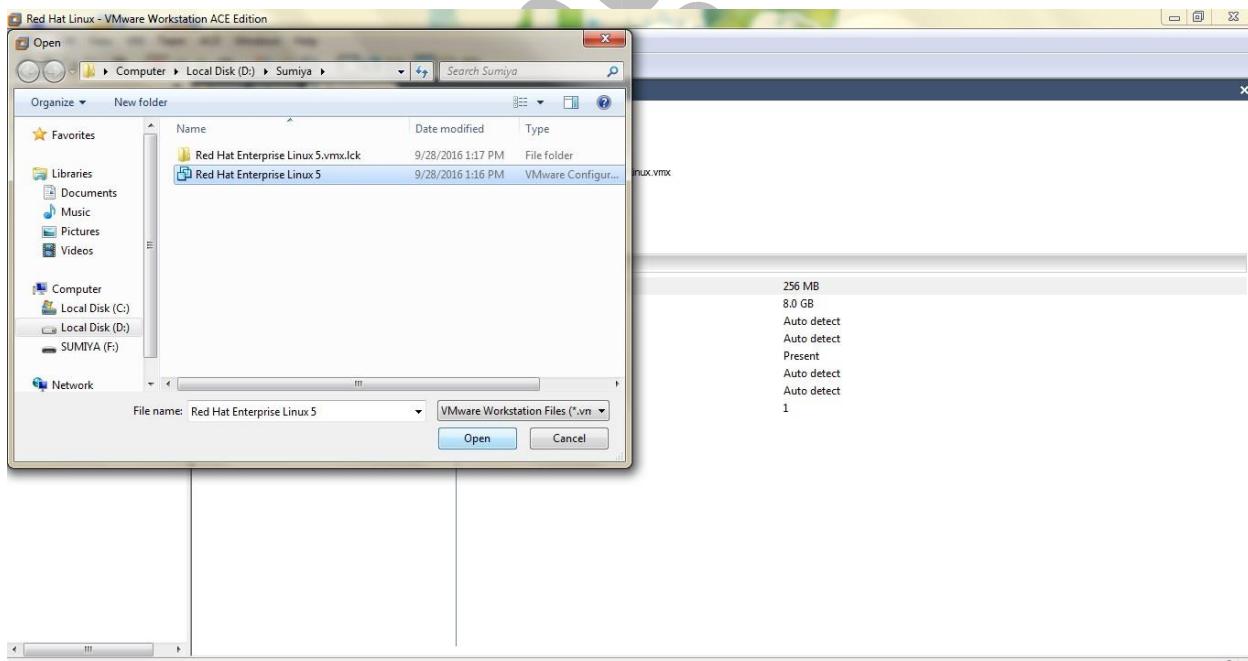
Step11:Your Virtual Machine is created successfully.Click close.



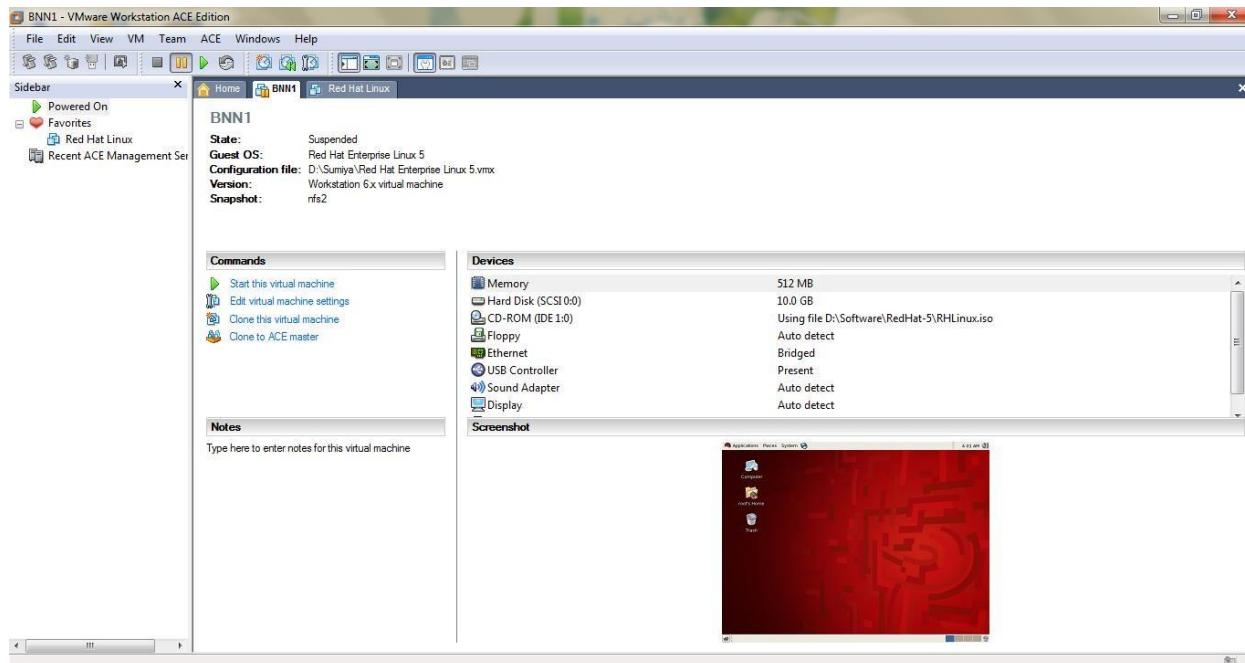
Step12:Click on File Open.



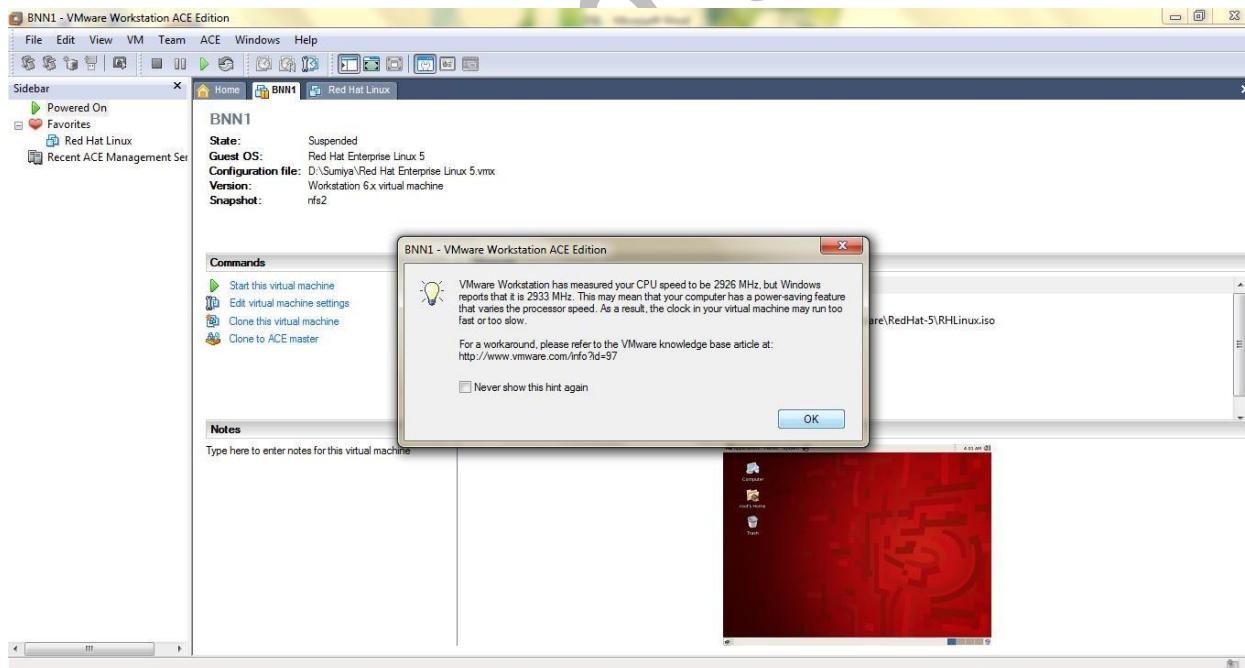
Step13: Browse and Select RedHat/Ubuntu for Linux and click on Open.



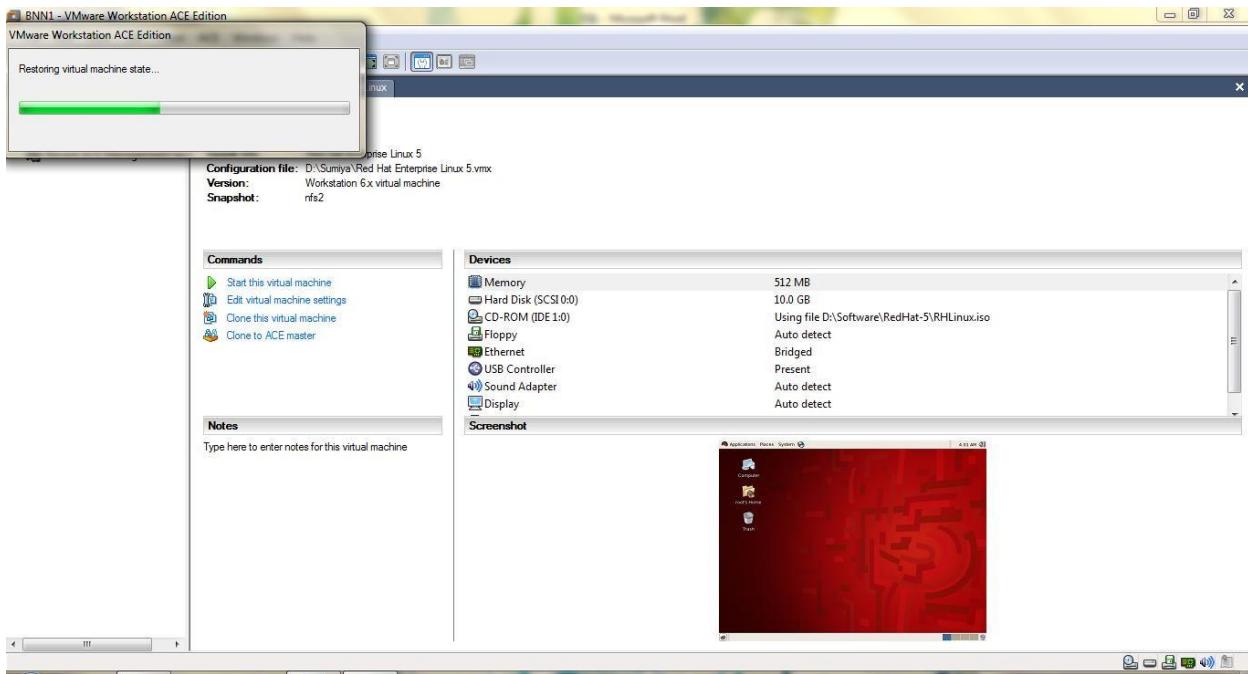
Step14:Then click on Start this Virtual Machine



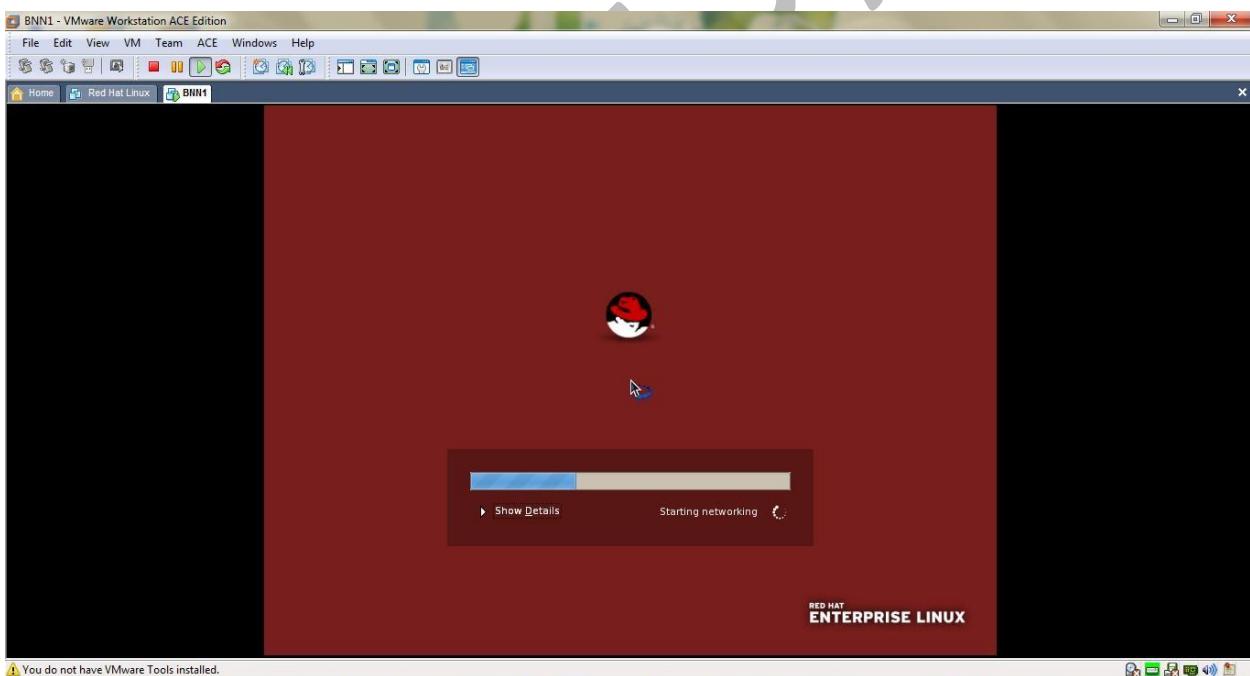
Step15:It will give you a hint click on OK.



Step16:Now it will load the desired Linux OS.



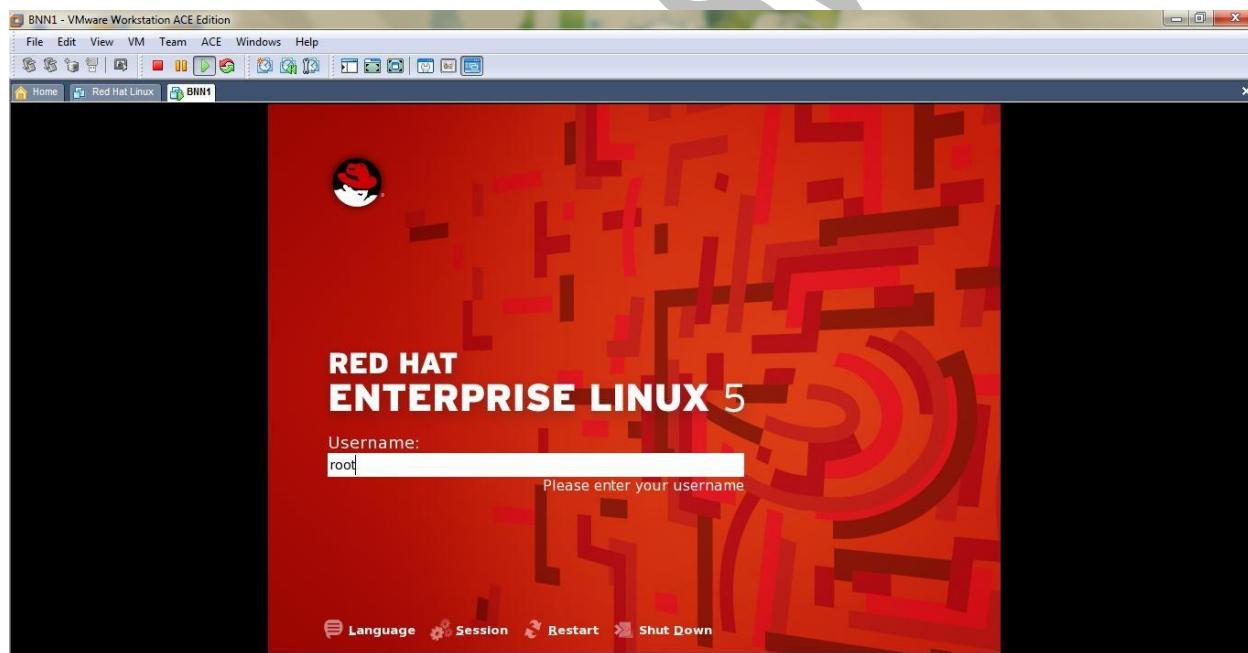
Step17:Now the Linux operating system is loading.

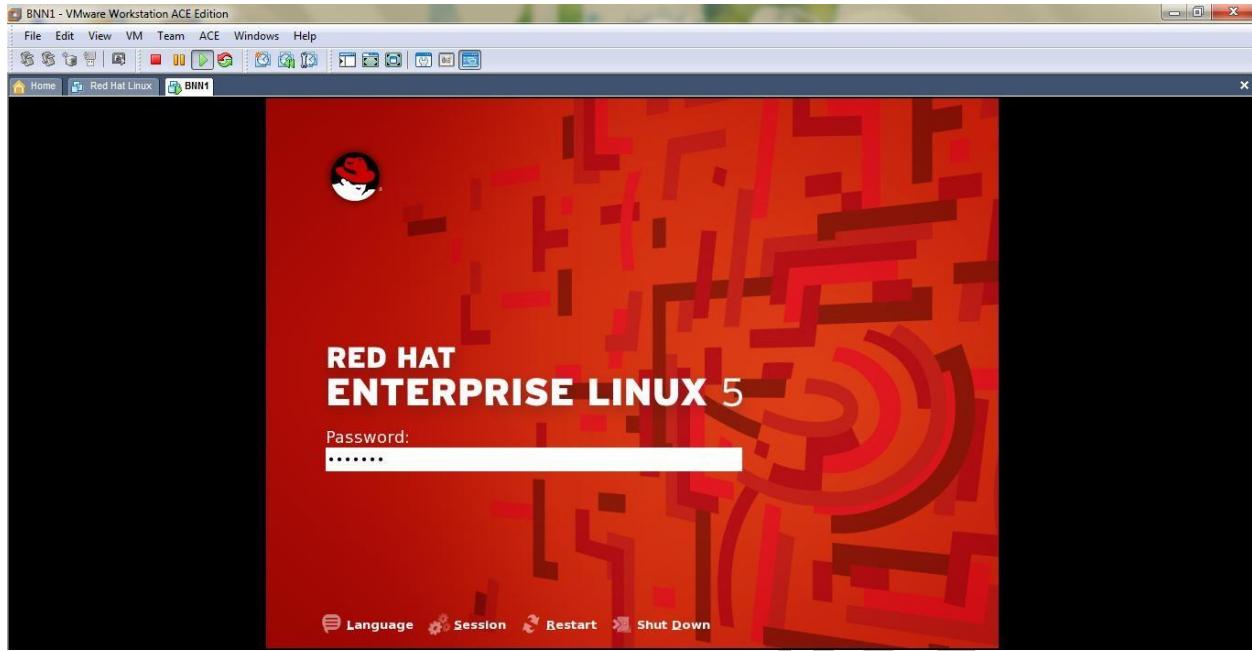


The screenshot shows a terminal window titled "Starting Red Hat Network support" displaying the output of a system boot process. The logs show various services starting, with most marked as "OK" and one service, "Starting sm-client", marked as "FAILED". The log ends with "Starting yum-updates: [OK]". The background of the terminal window is red, and the bottom right corner displays the "RED HAT ENTERPRISE LINUX" logo.

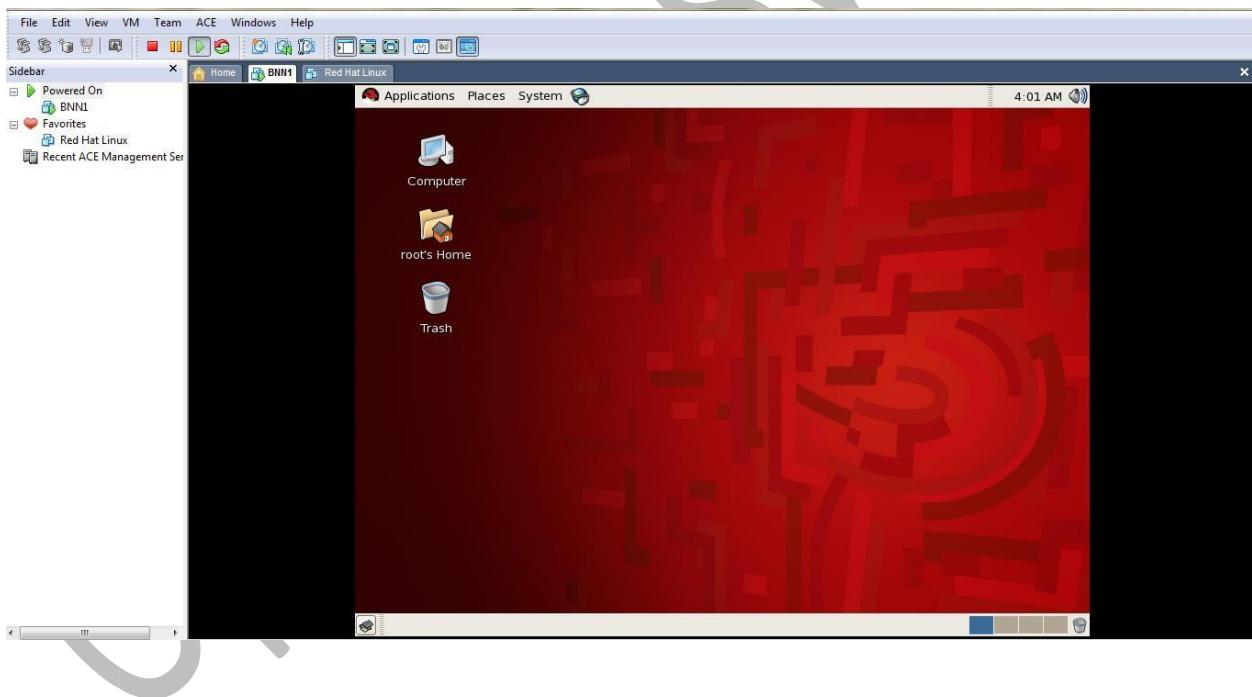
```
Starting RPC idmapd: [ OK ]
Starting system message bus: [ OK ]
Starting Bluetooth services: [ OK ]
Mounting other filesystems: [ OK ]
Starting PC/SC smart card daemon (pcscd): [ OK ]
Starting hid: [ OK ]
Starting autofs: Loading autofs4: [ OK ]
Starting automount: [ OK ]
Starting acpi daemon: [ OK ]
Starting hpiod: [ OK ]
Starting hpsd: [ OK ]
Starting sshd: [ OK ]
Starting cups: [ OK ]
Starting sendmail: 554 5.0.0 No local mailer defined
554 5.0.0 QueueDirectory (0) option must be set [ FAILED ]
Starting sm-client: [ FAILED ]
Starting console mouse services: [ OK ]
Starting crond: [ OK ]
Starting xfs: [ OK ]
Starting anacron: [ OK ]
Starting atd: [ OK ]
Starting background readahead: [ OK ]
Starting yum-updates: [ OK ]
```

Step18: Now add the username and password for the user to login on Linux operating system(username :root password:root123).





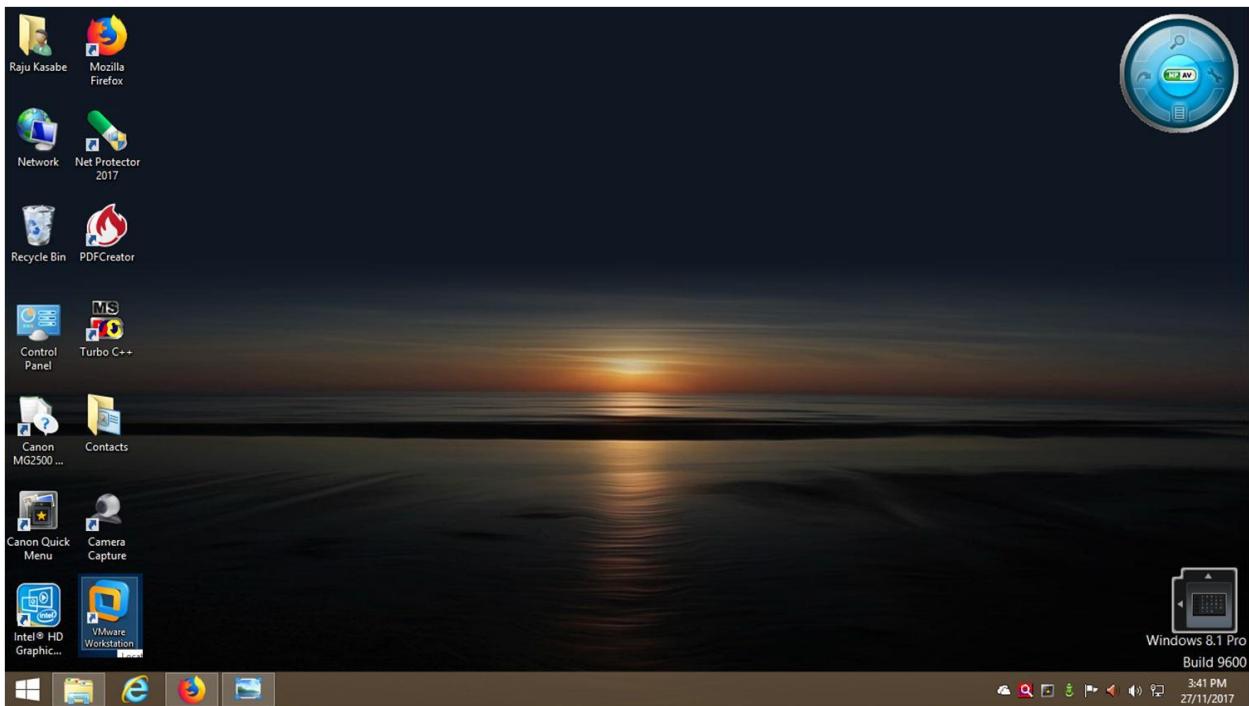
Step19: After adding the username and password the system will start Linux OS.



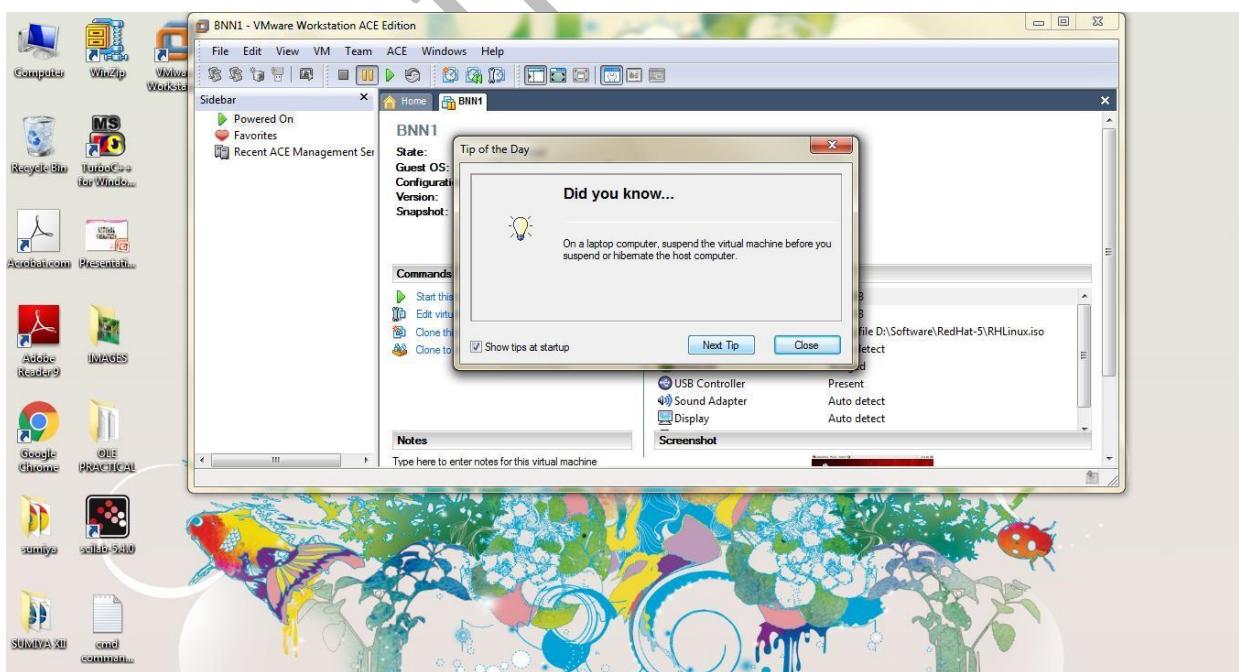
PRACTICAL NO.3

Aim: Installation of Windows OS on Virtual Machine.

Step1: To install Windows Operating System on Virtual Machine open VMware Workstation.

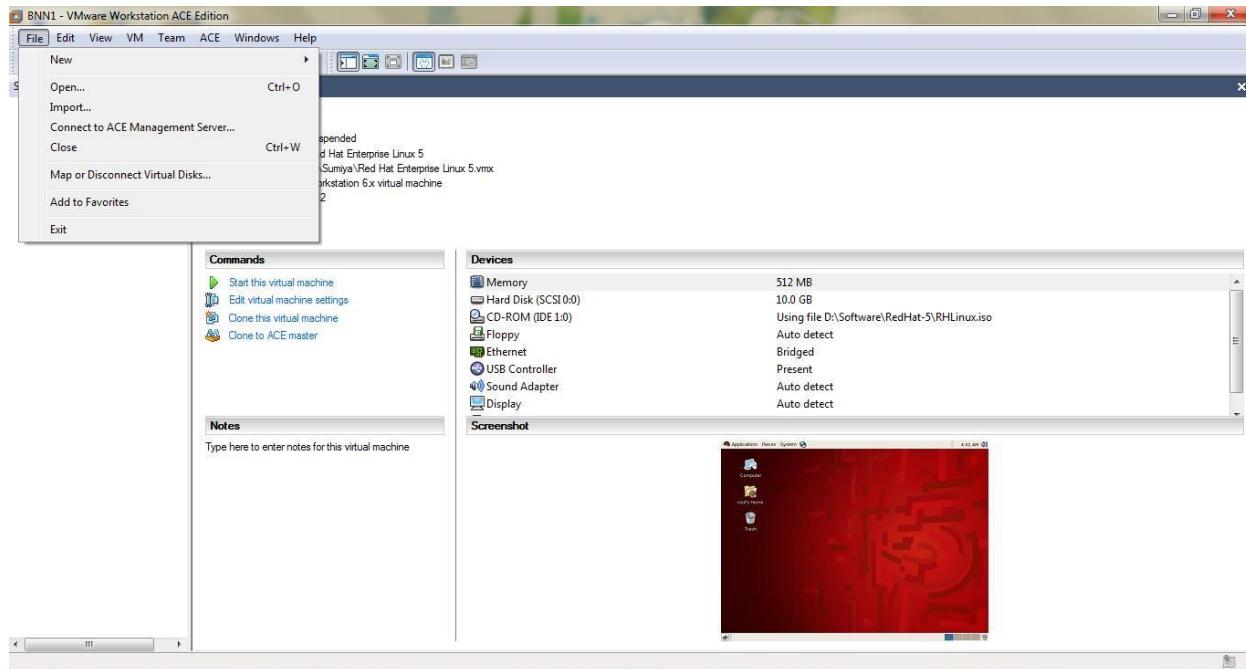


Step2: VMware Workstation will open.

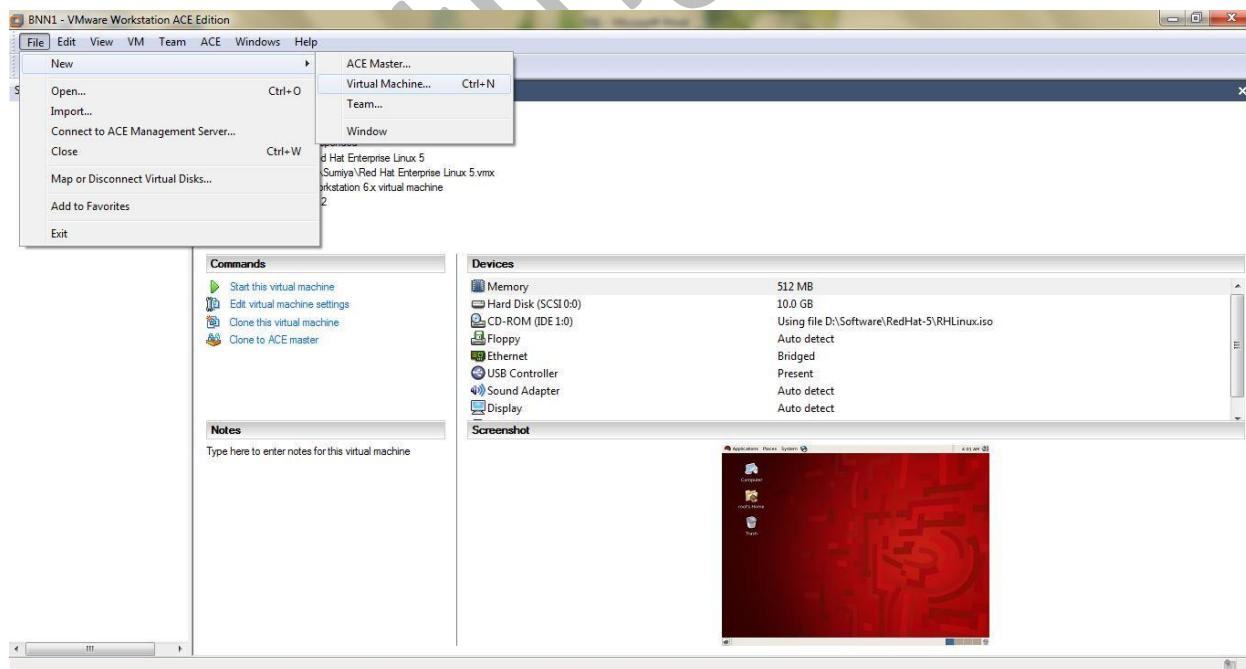


**Whenever you open VMware Workstation it will provide you with useful tips,
after Reading tips tap on close.**

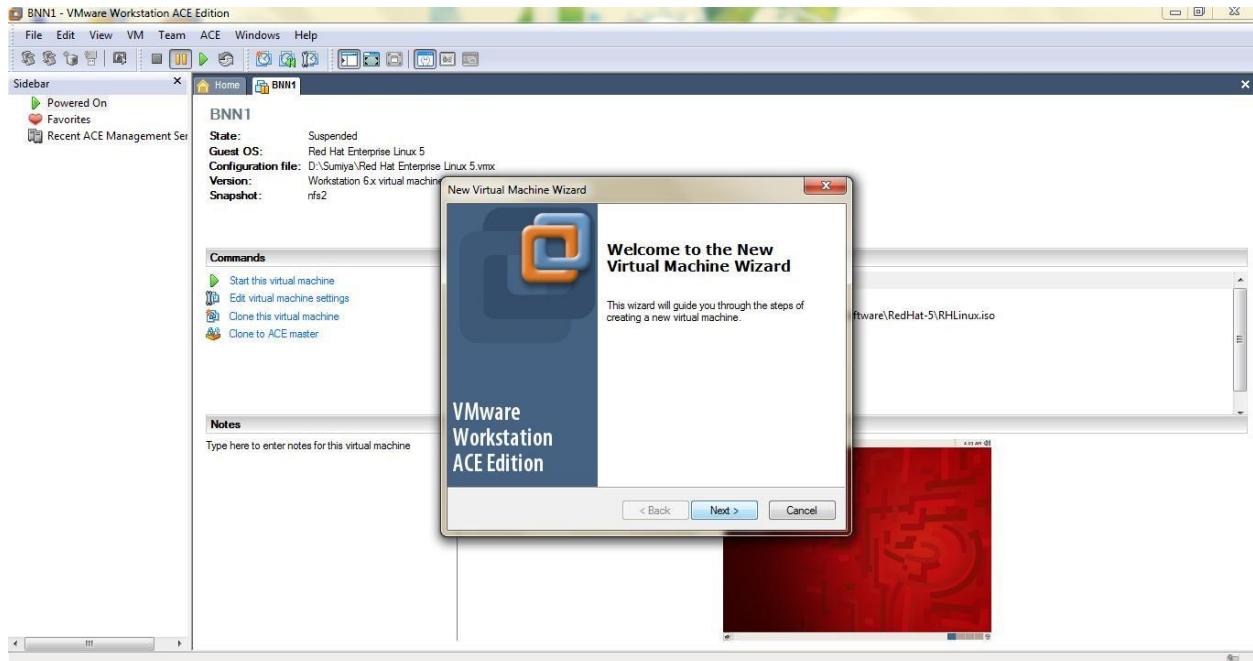
Step3:Select file from the top left hand side.



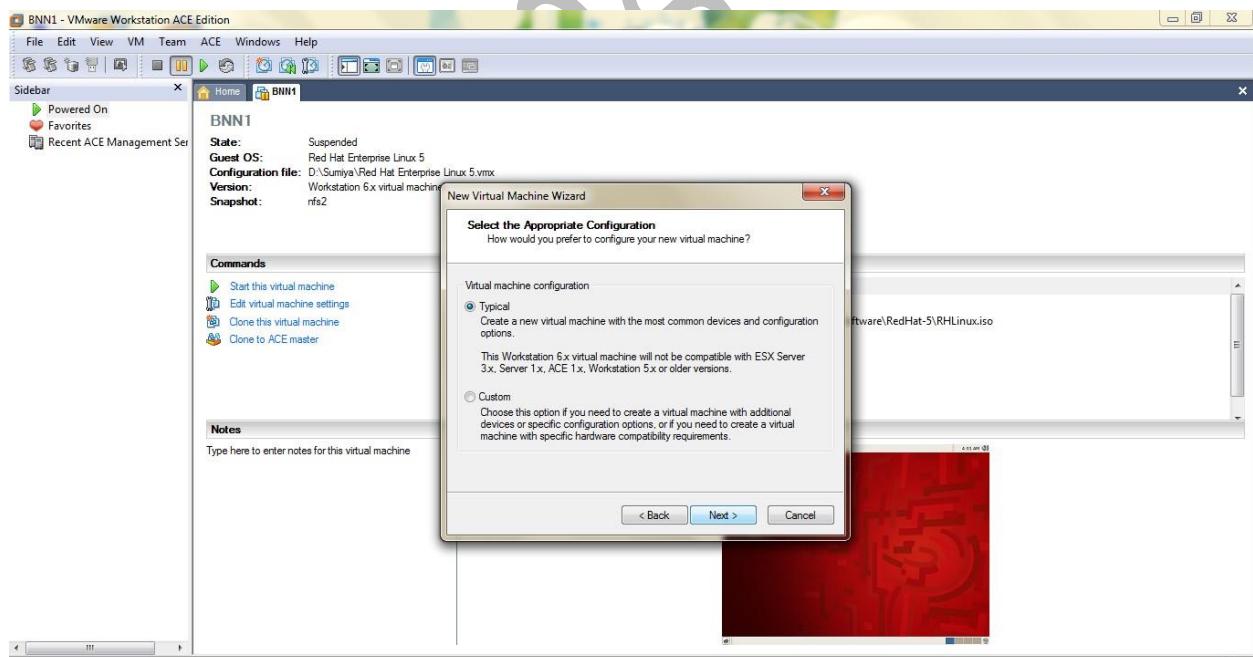
Step4: Then click on New Virtual Machine. OR Press Ctrl+N on keyboard.



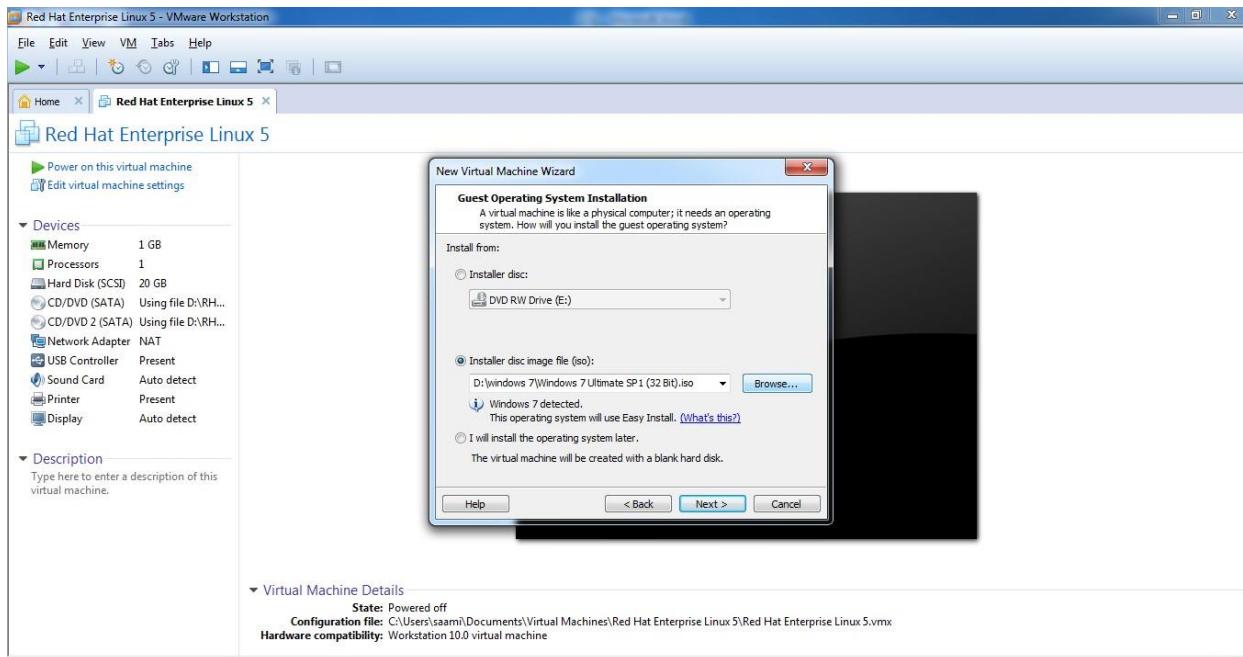
Step5: A new dialogue box will appear to install Virtual Machine and click on Next.



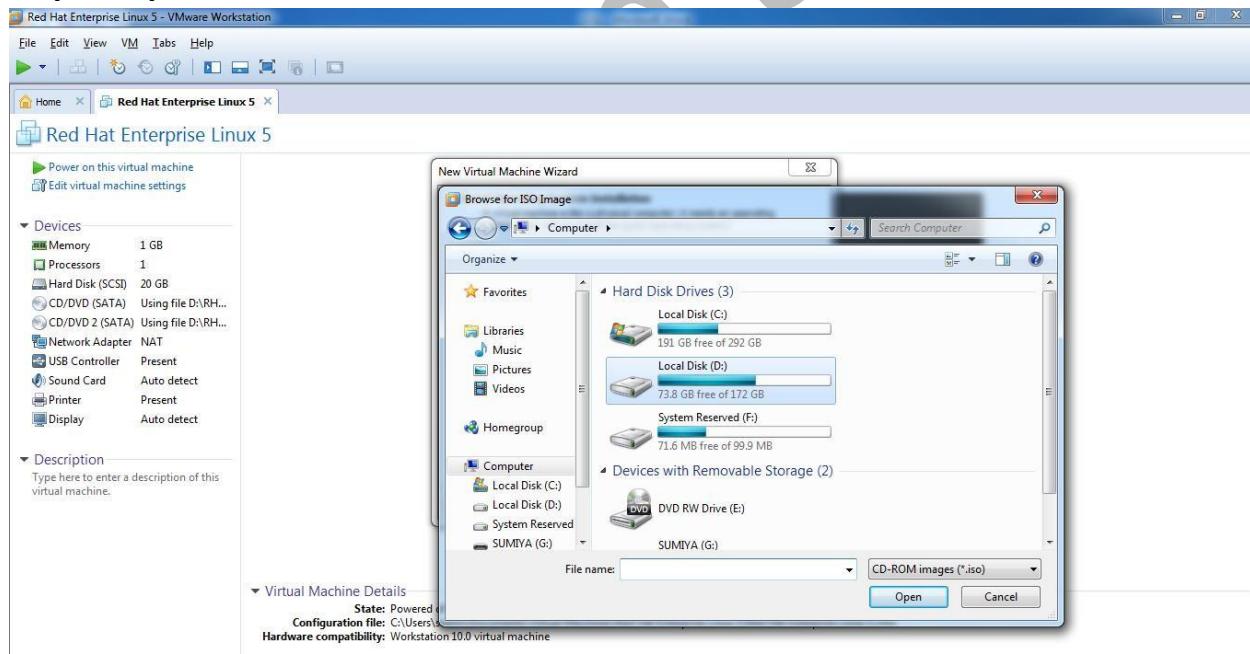
Step6: Select Typical and click on Next.



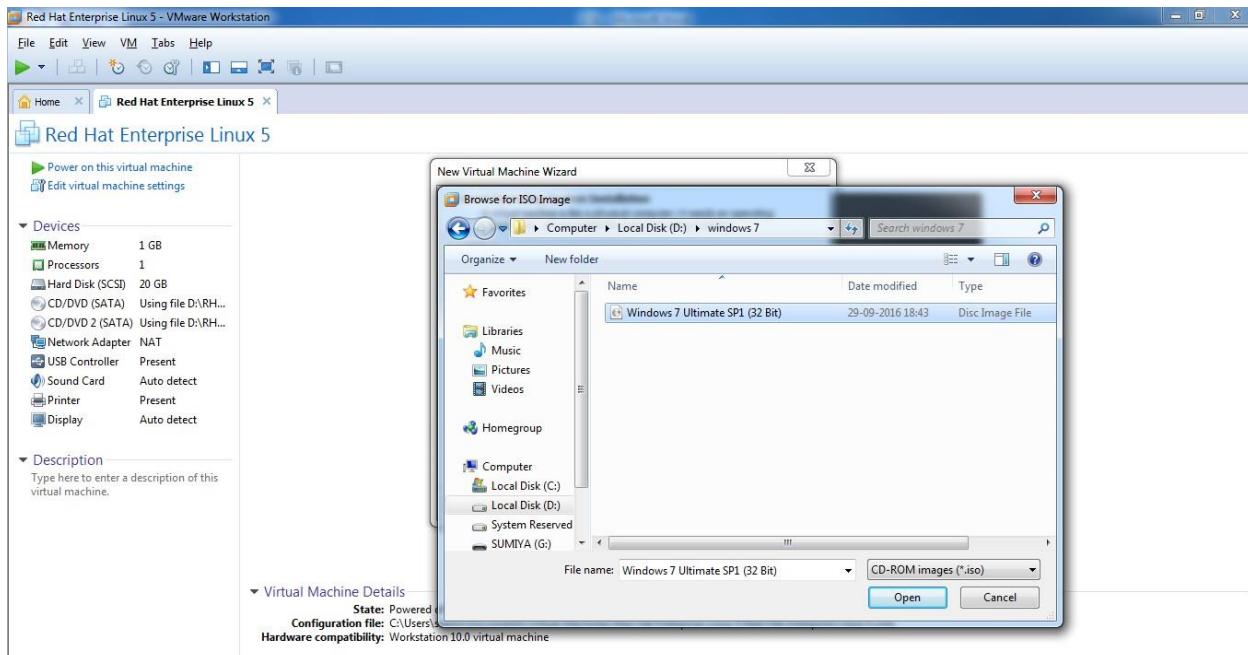
Step7: Click on Next.



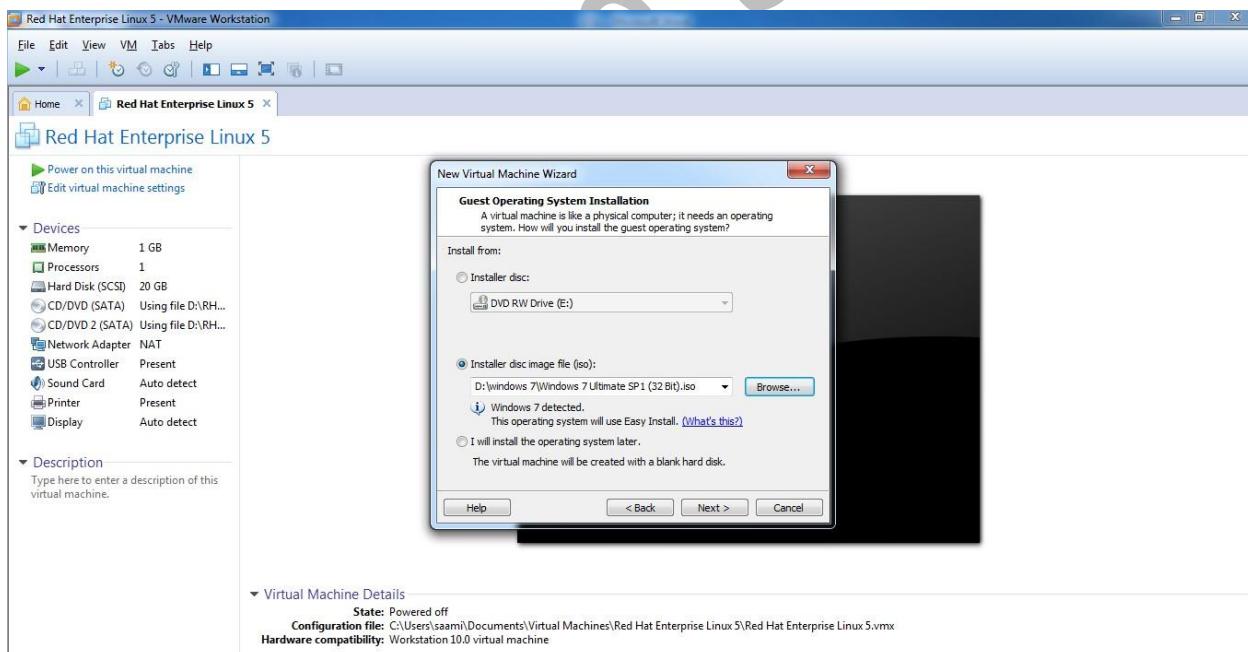
Step8: Tap on Browse.



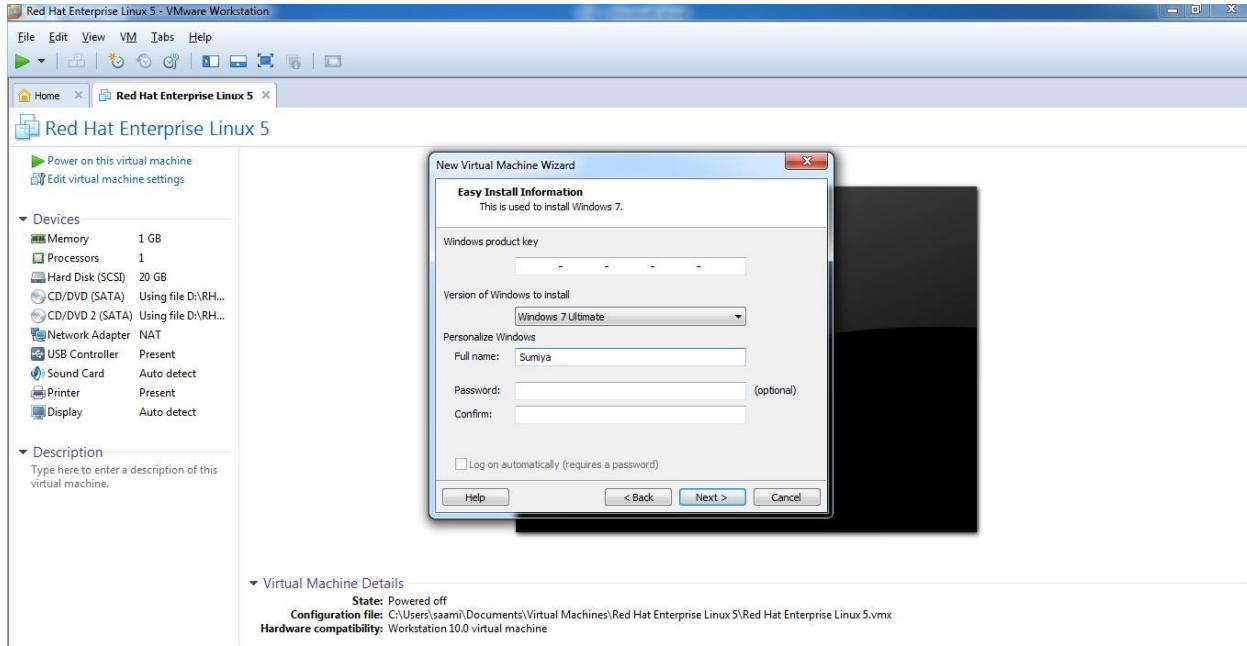
Step9:Locate “Windows7.iso” file.



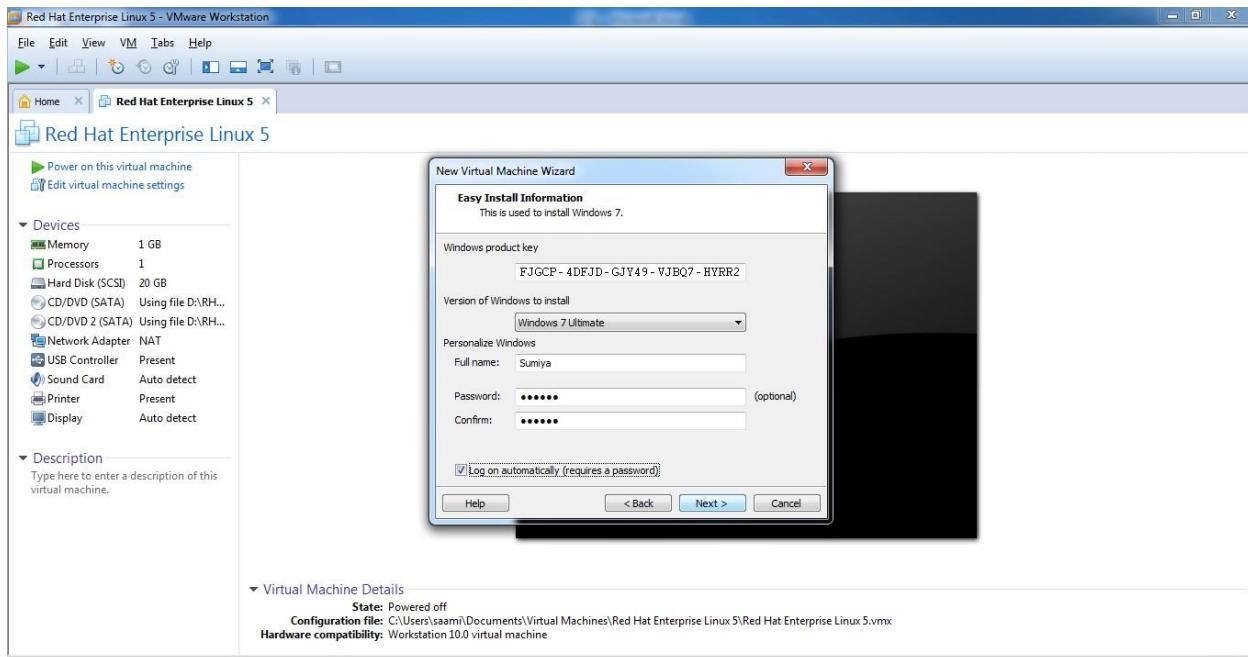
Step10: Click on open.



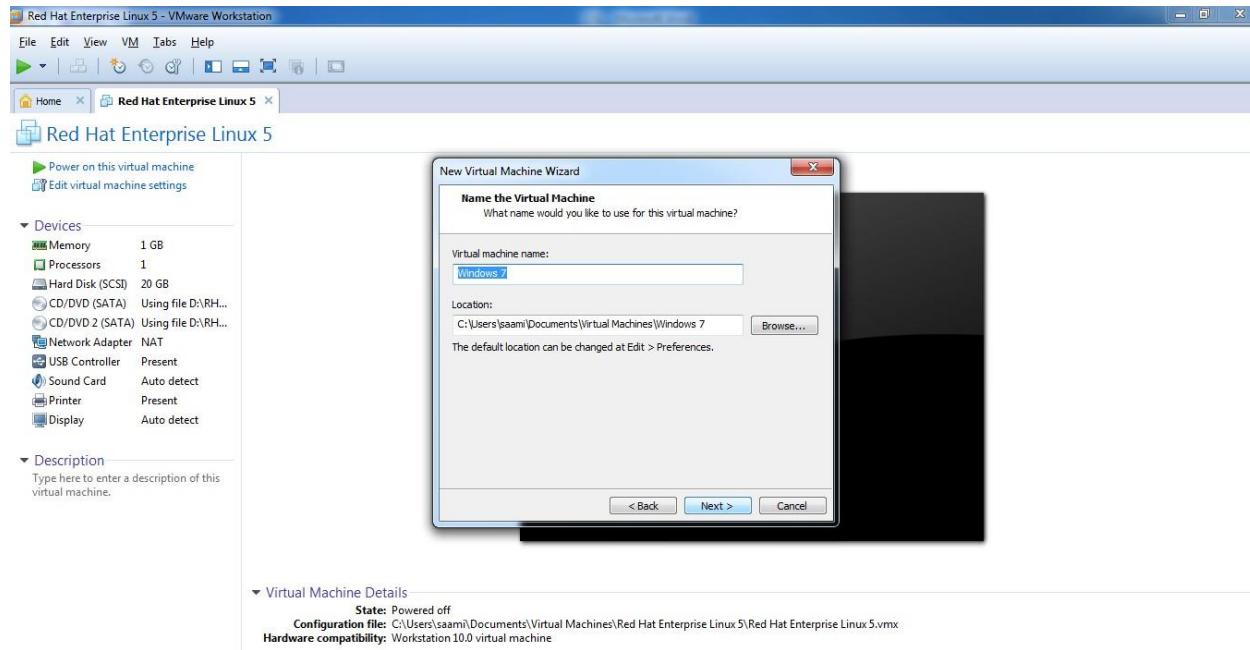
Step11: Click Next



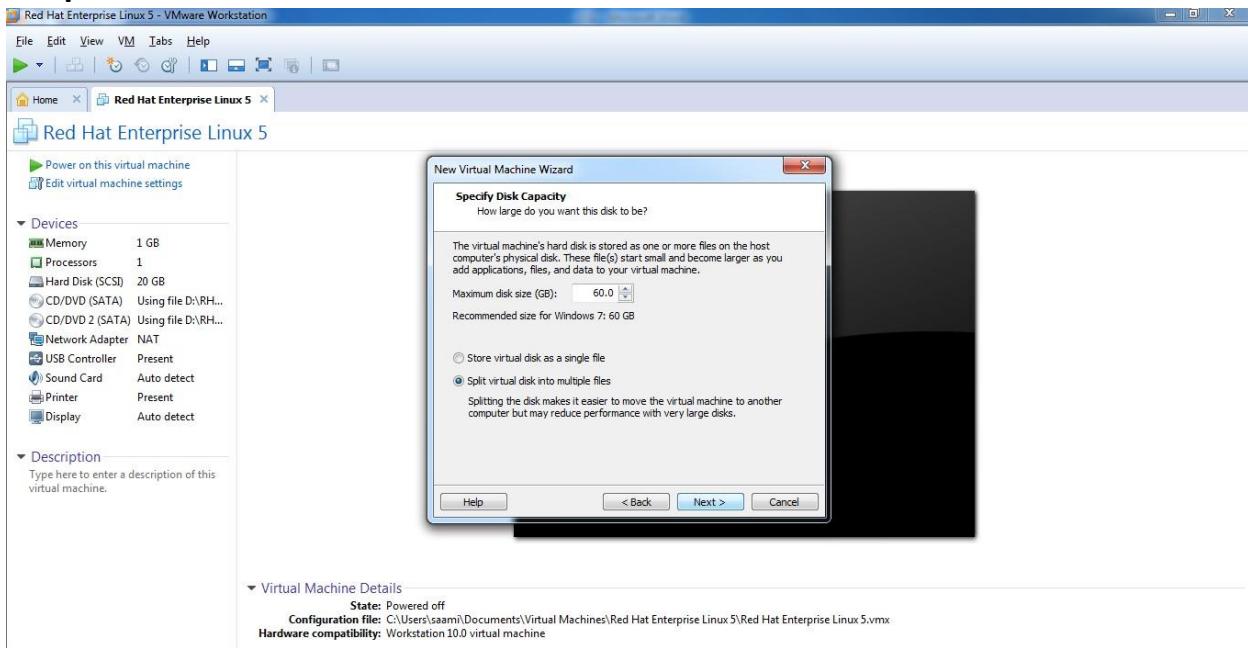
Step12: Provide the product key and username and password.



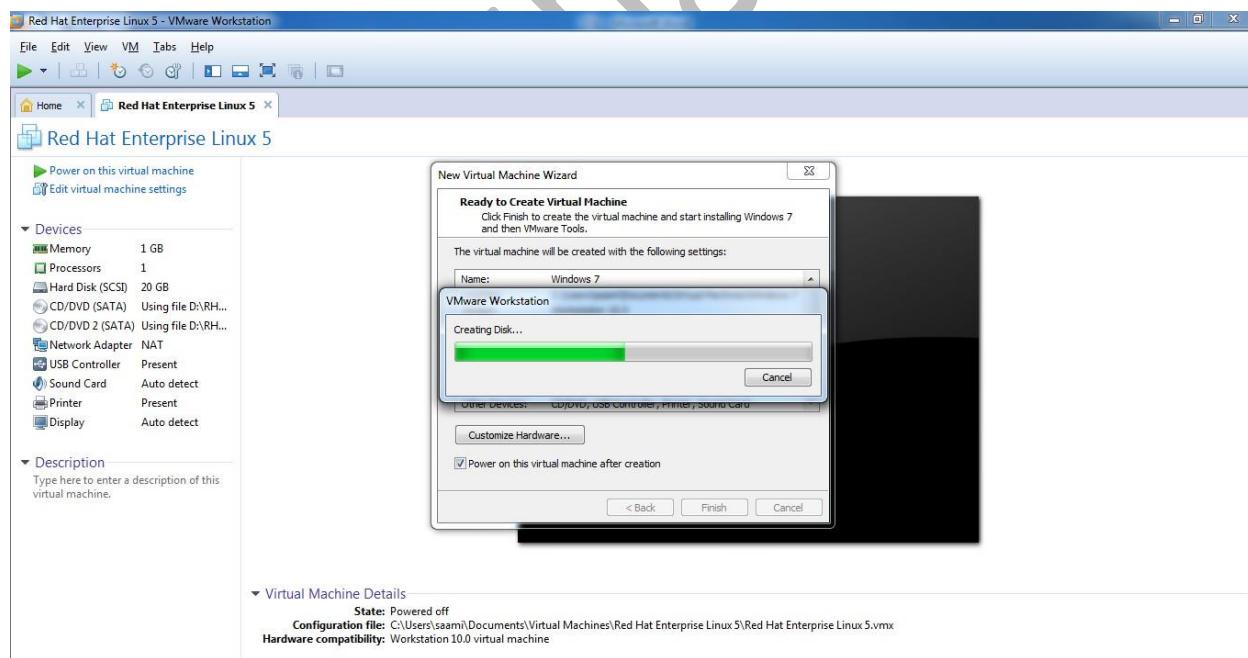
Step13:Click on Next.

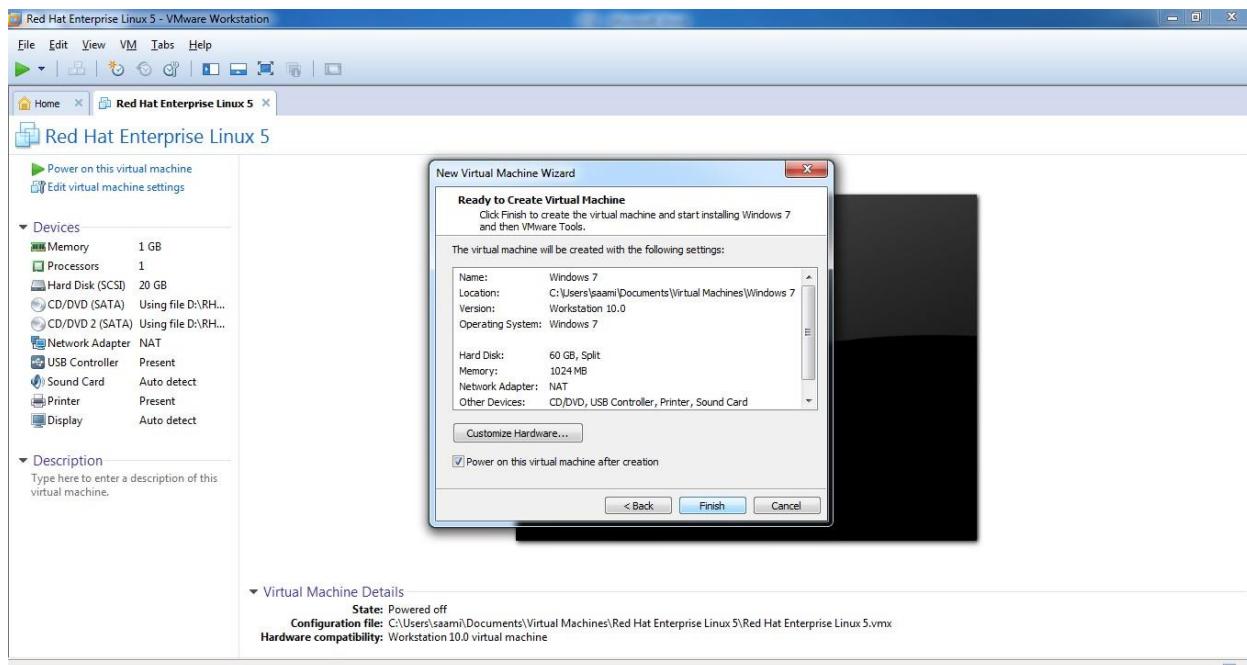


Step14: Click on Next.



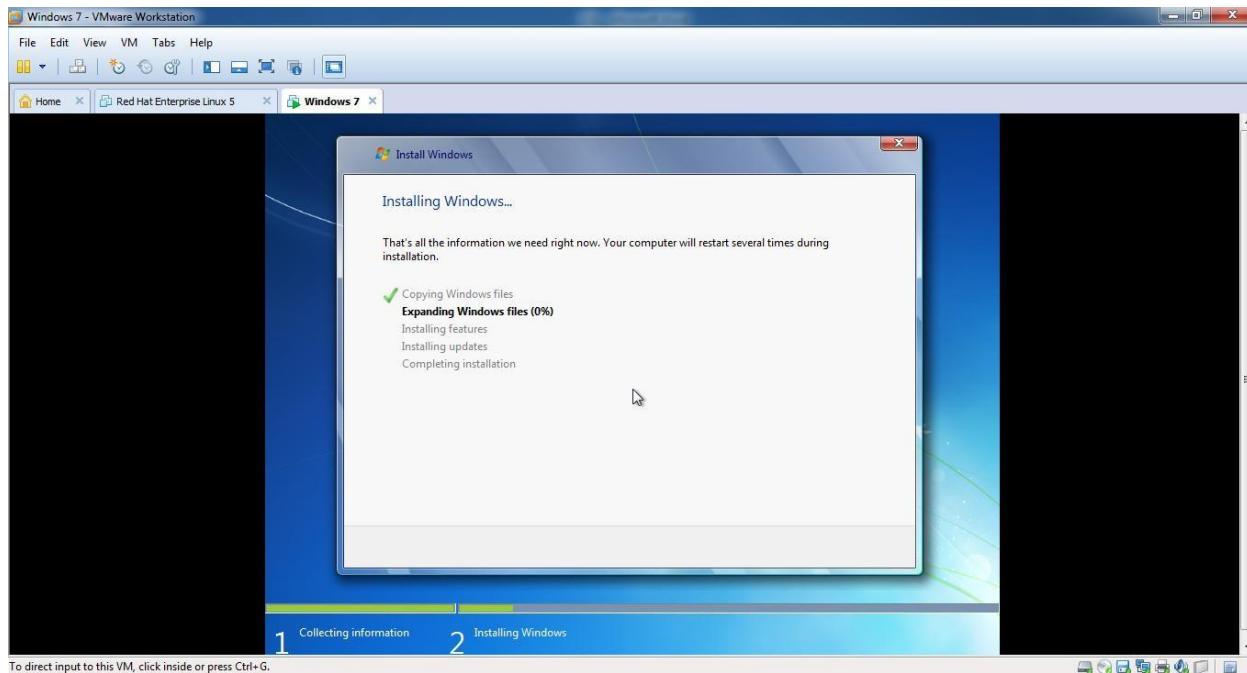
Step18: Click on Next.



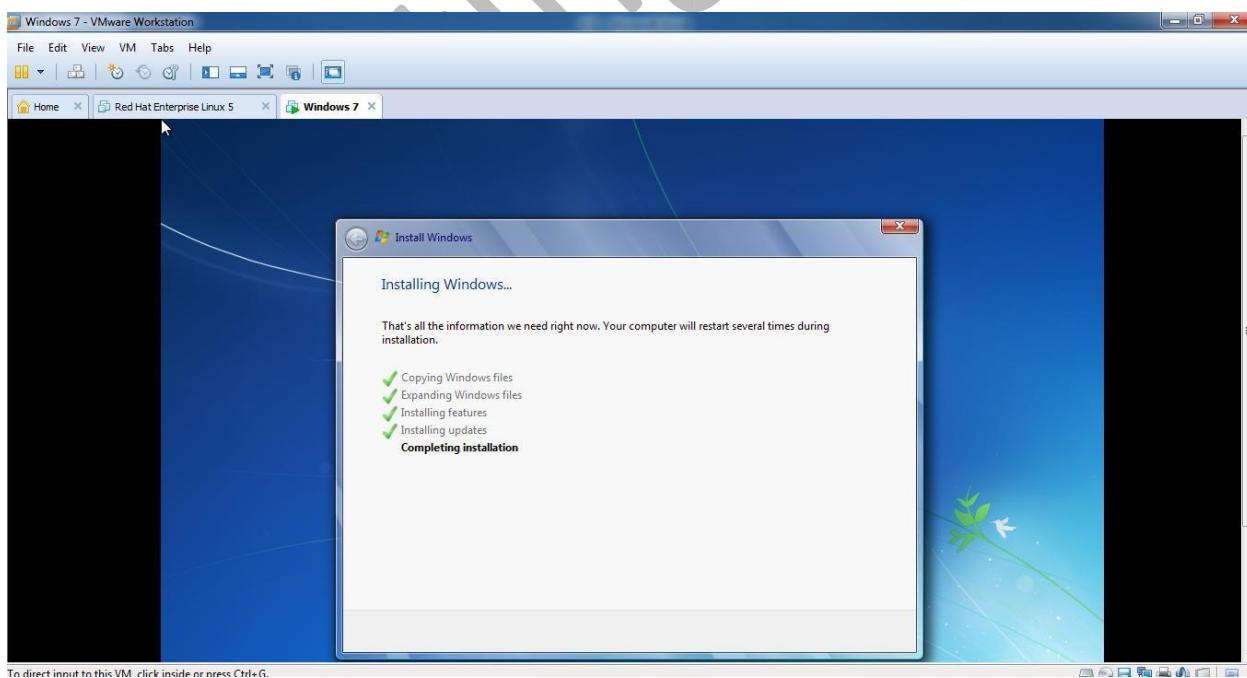


Step19: Click on Finish.

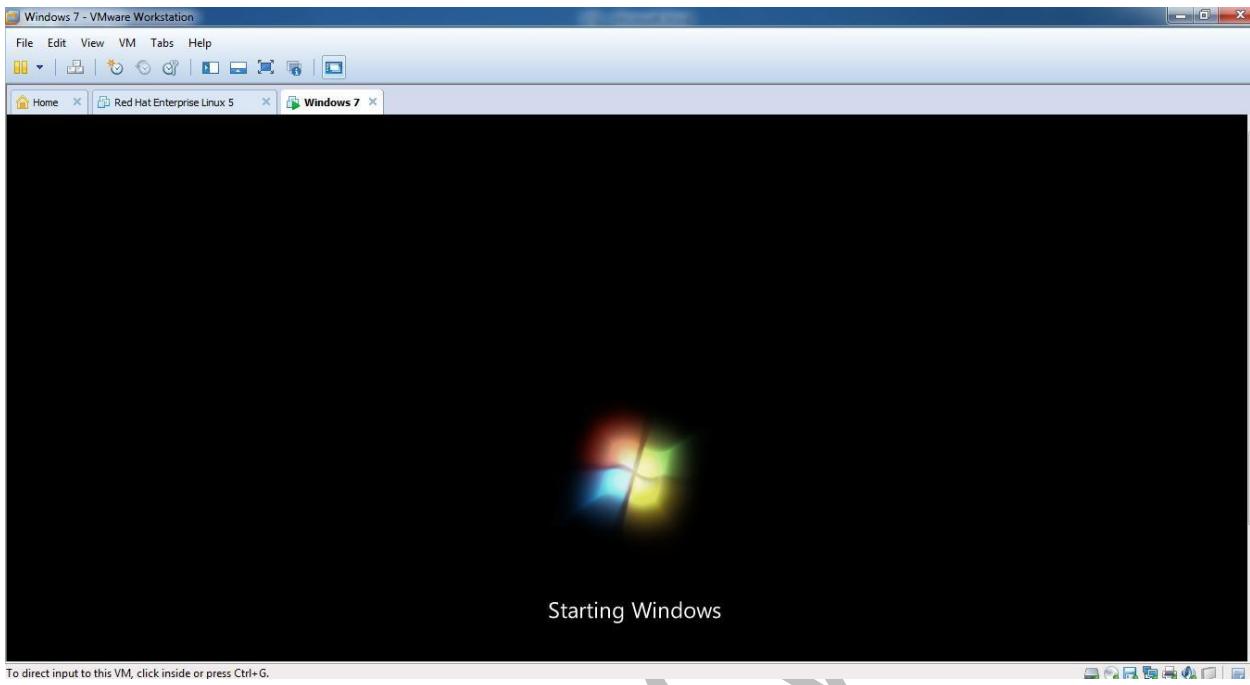
Step20: After creating the disk it will start windows7 OS installation.



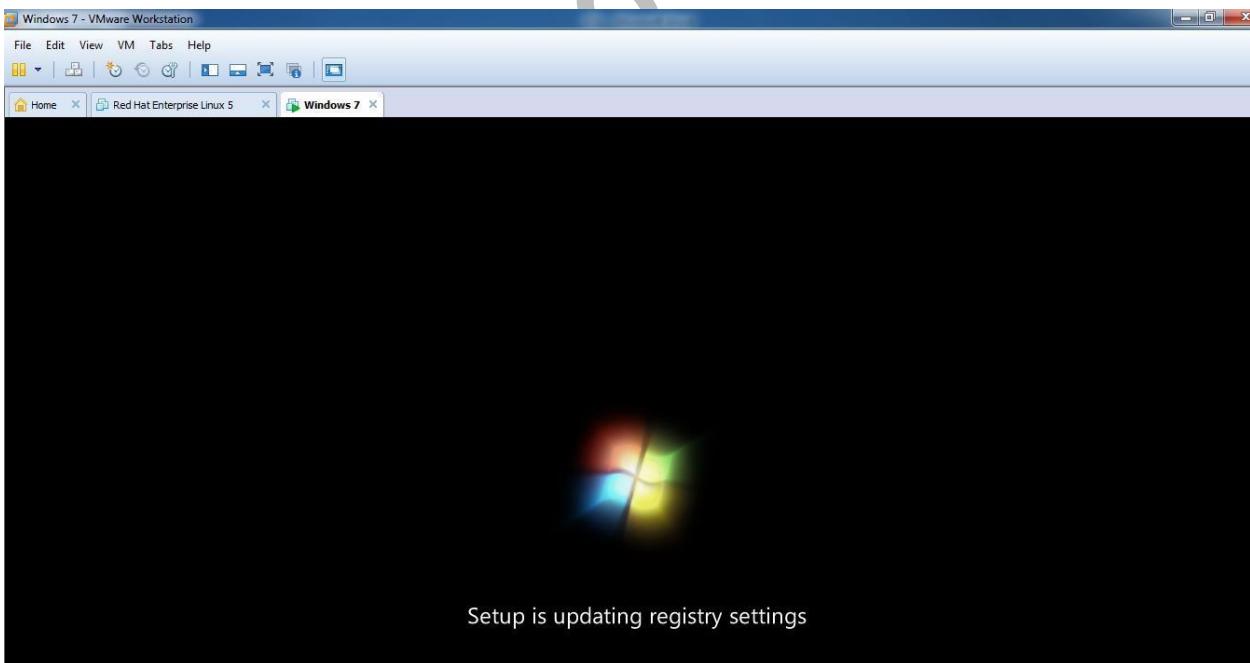
Step21:Wait for the set up to complete the windows7 installation.



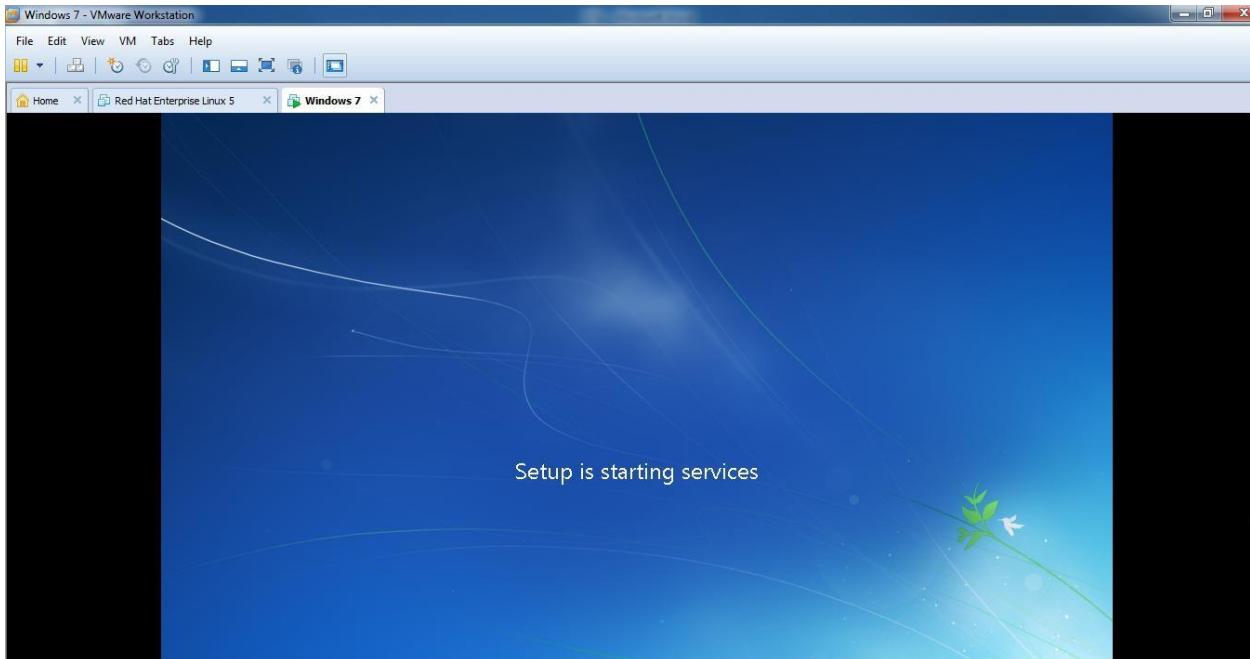
Step22:After completing the installation the windows7 will start.



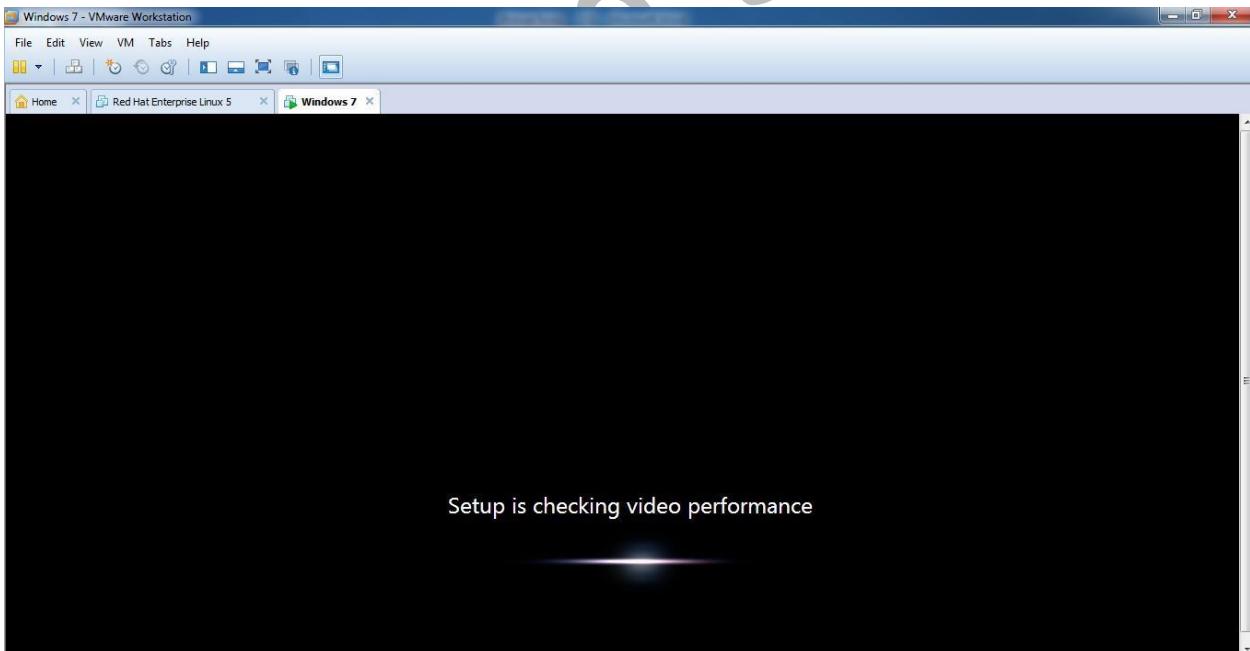
Step23:The set up will update the registry settings.



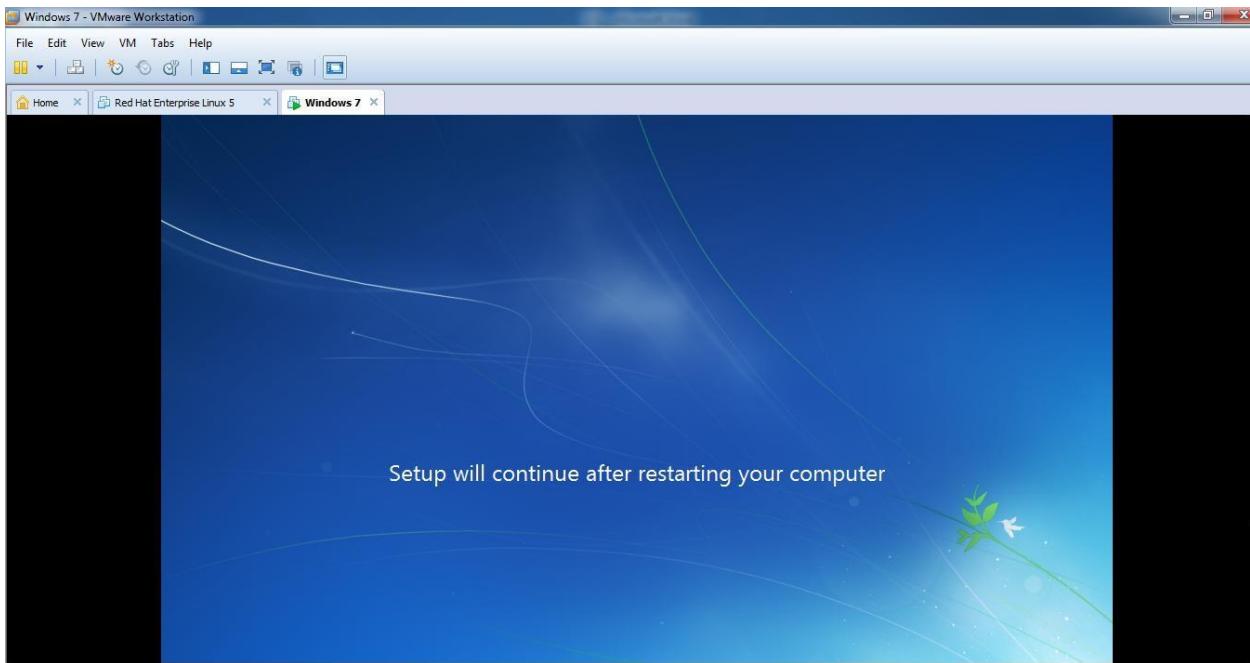
Step24:The setup will start services.



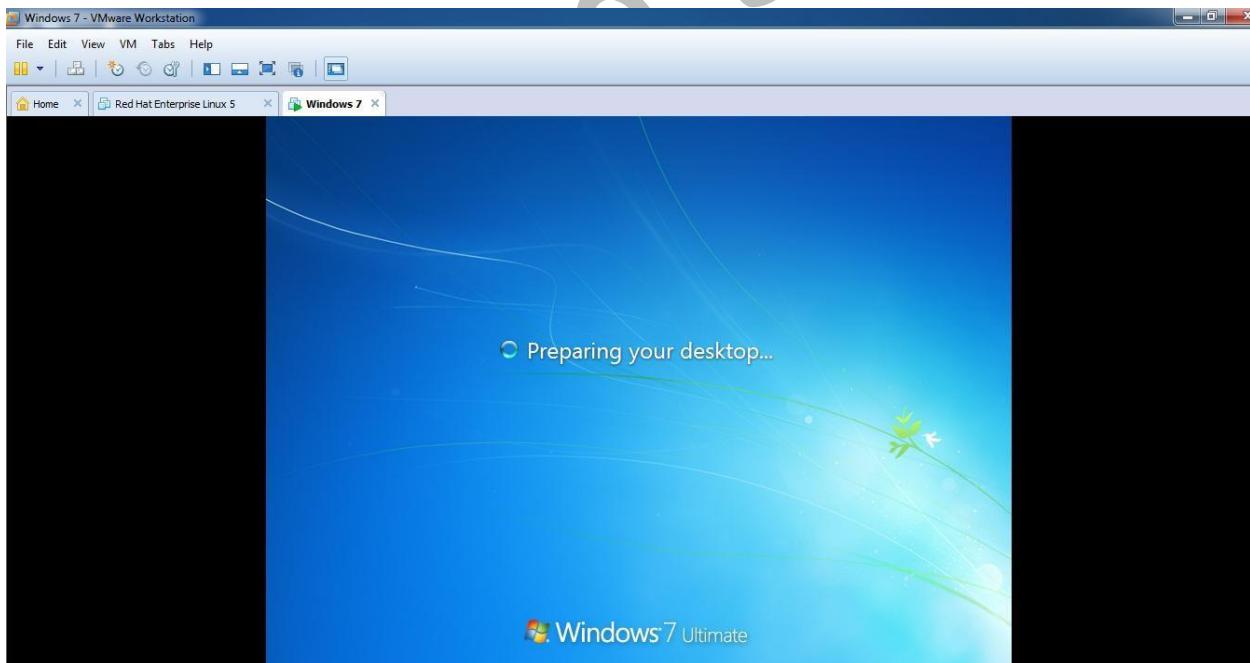
Step24: The system will check video performance.



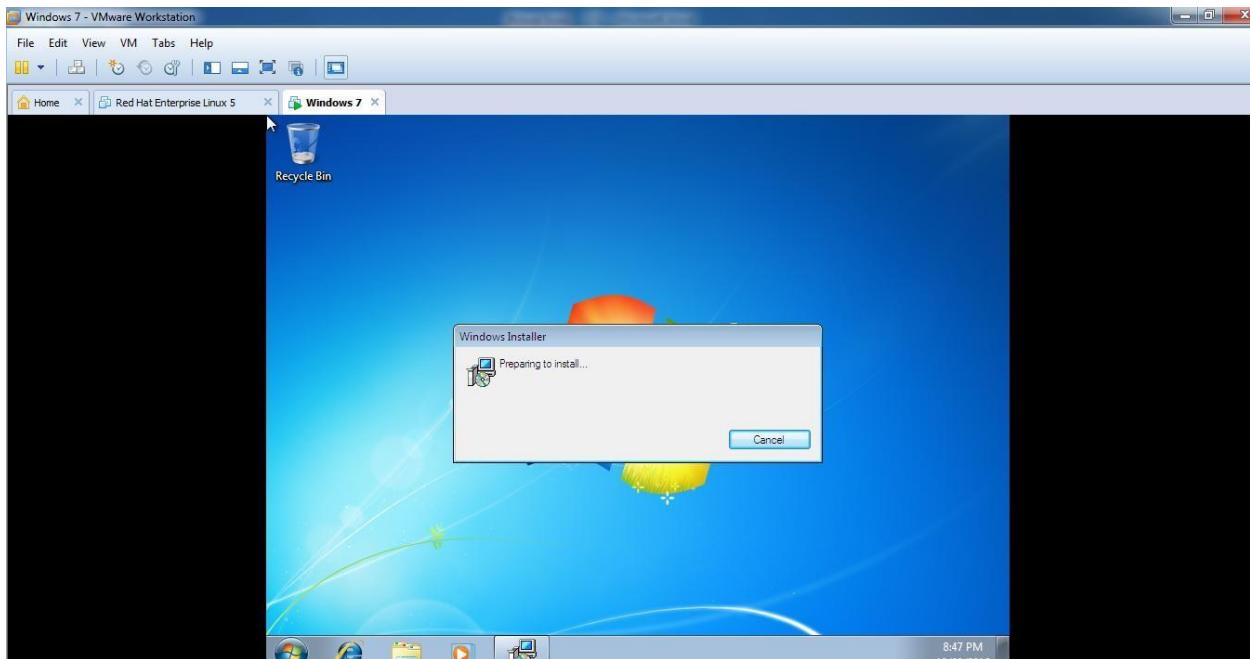
Step25: Setup will continue after restarting the computer.



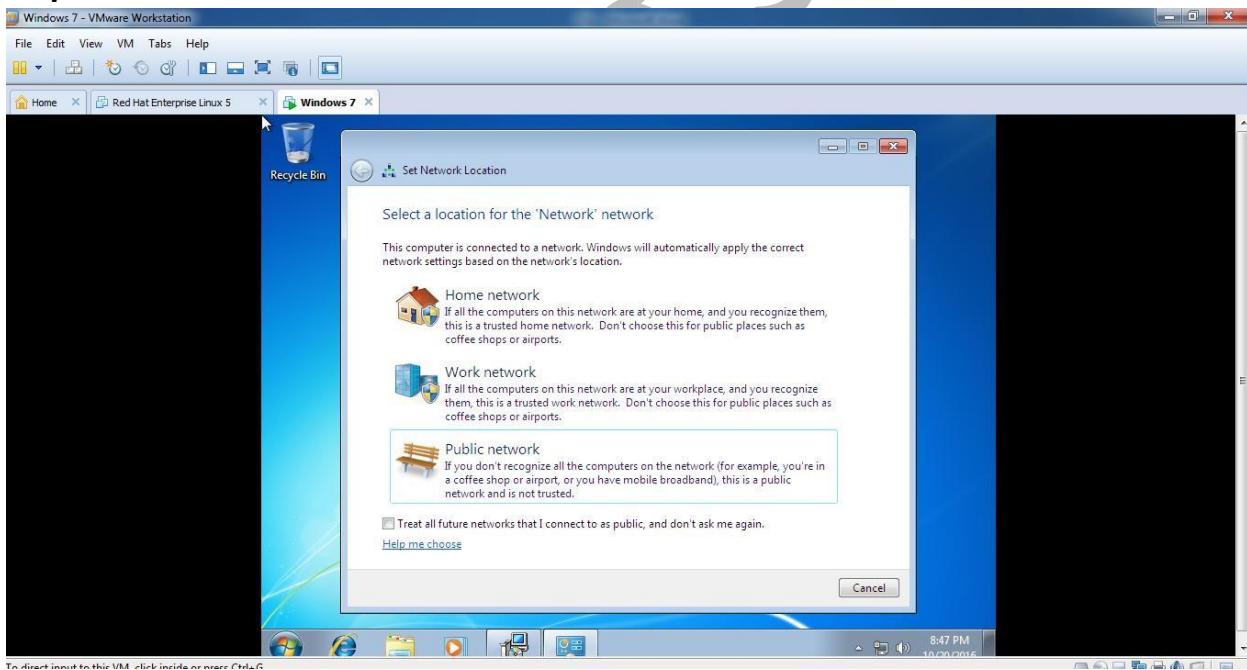
Step26: Now it will prepare the desktop.



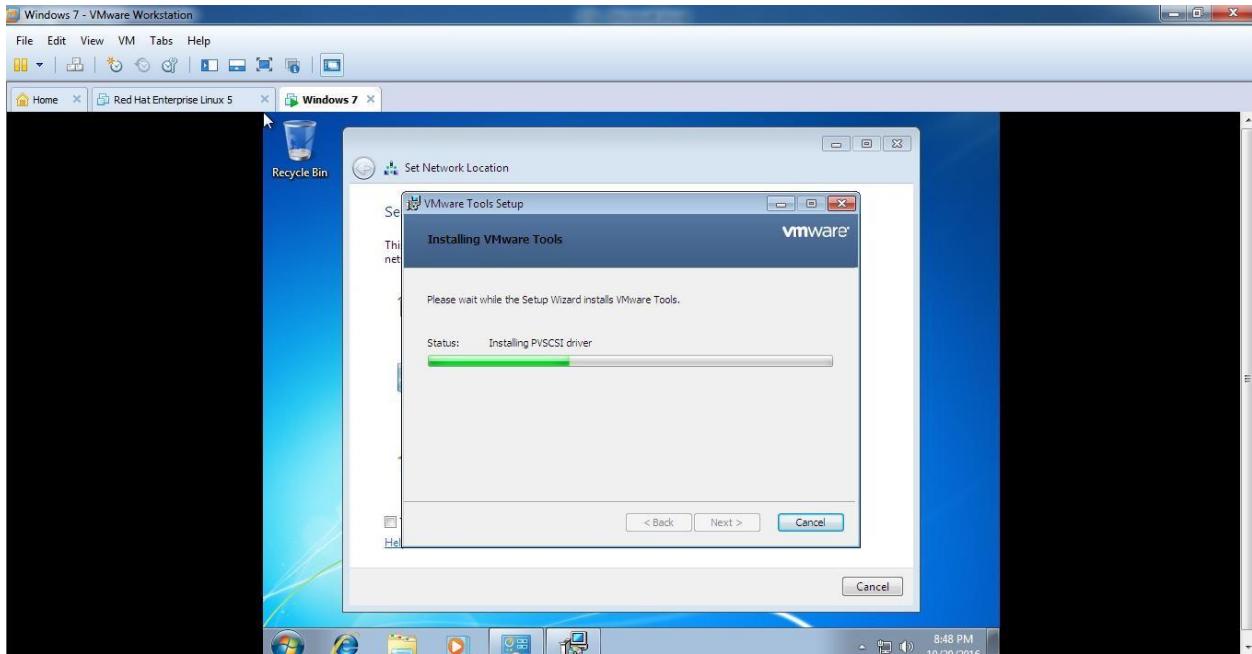
Step27:The setup will prepare installation....



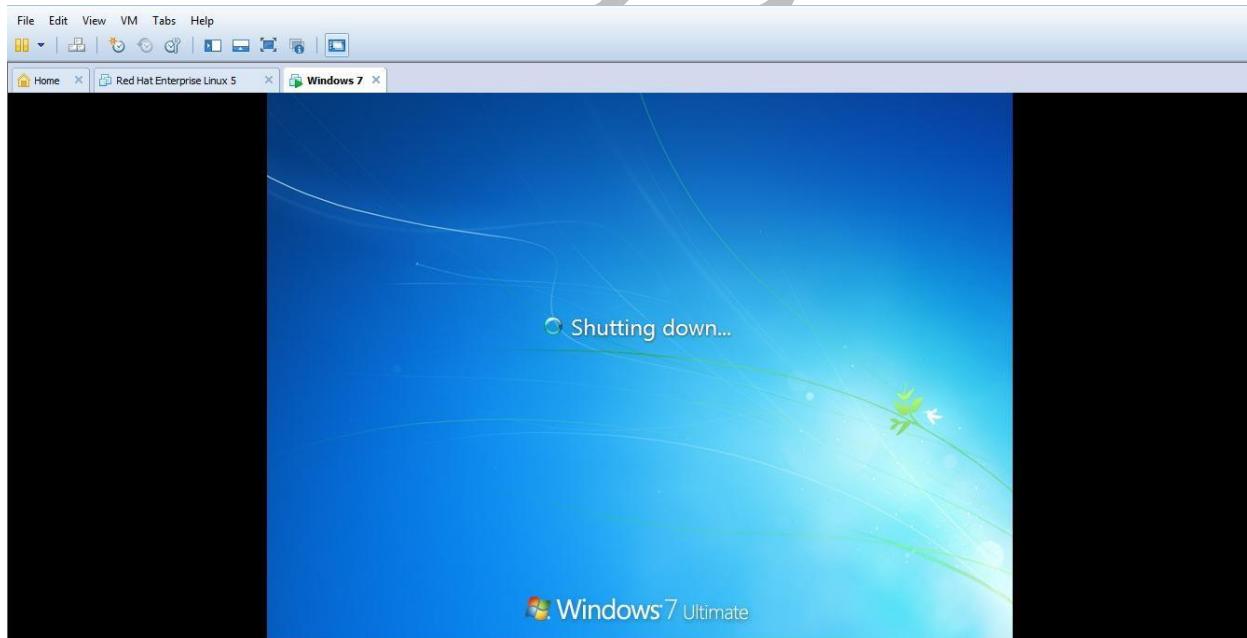
Step28:Now it will set network location.



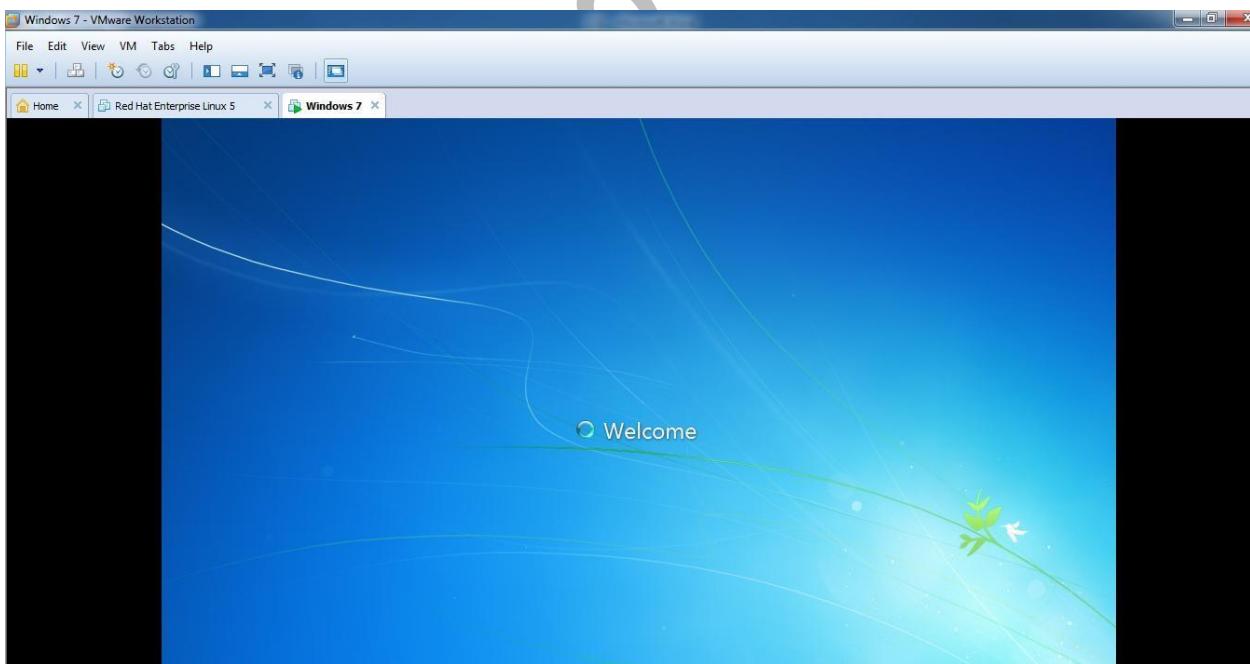
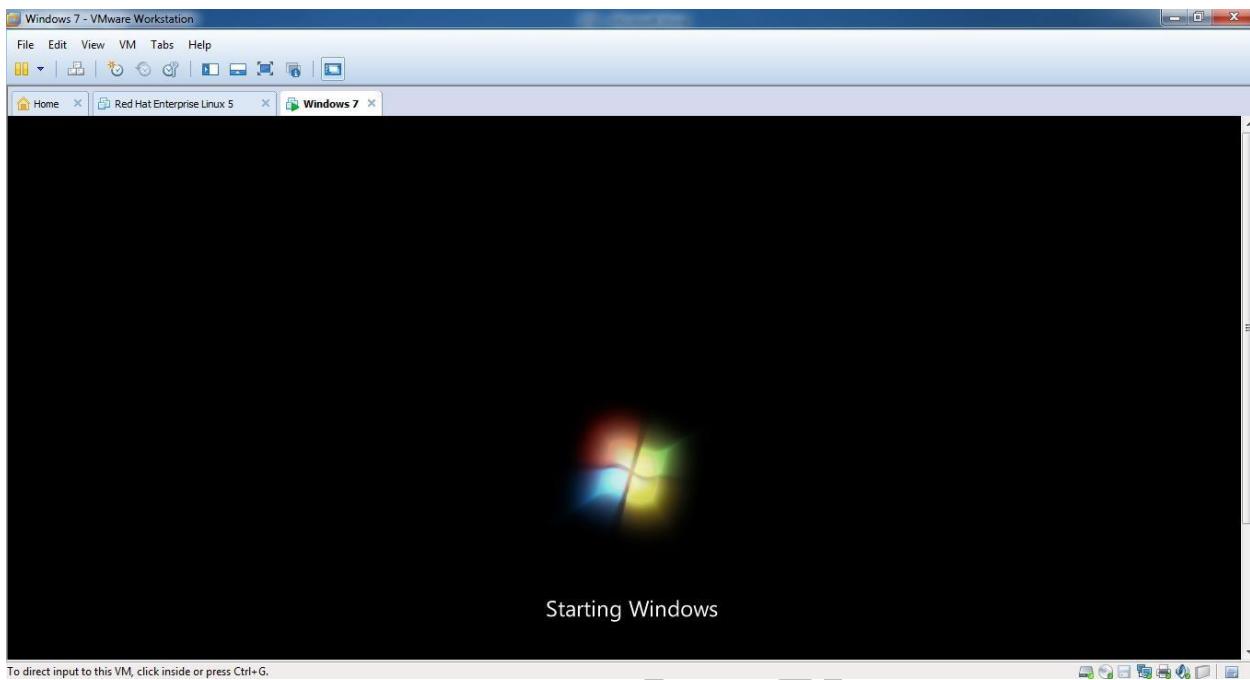
Step29:It will automatically install VMware Tools.



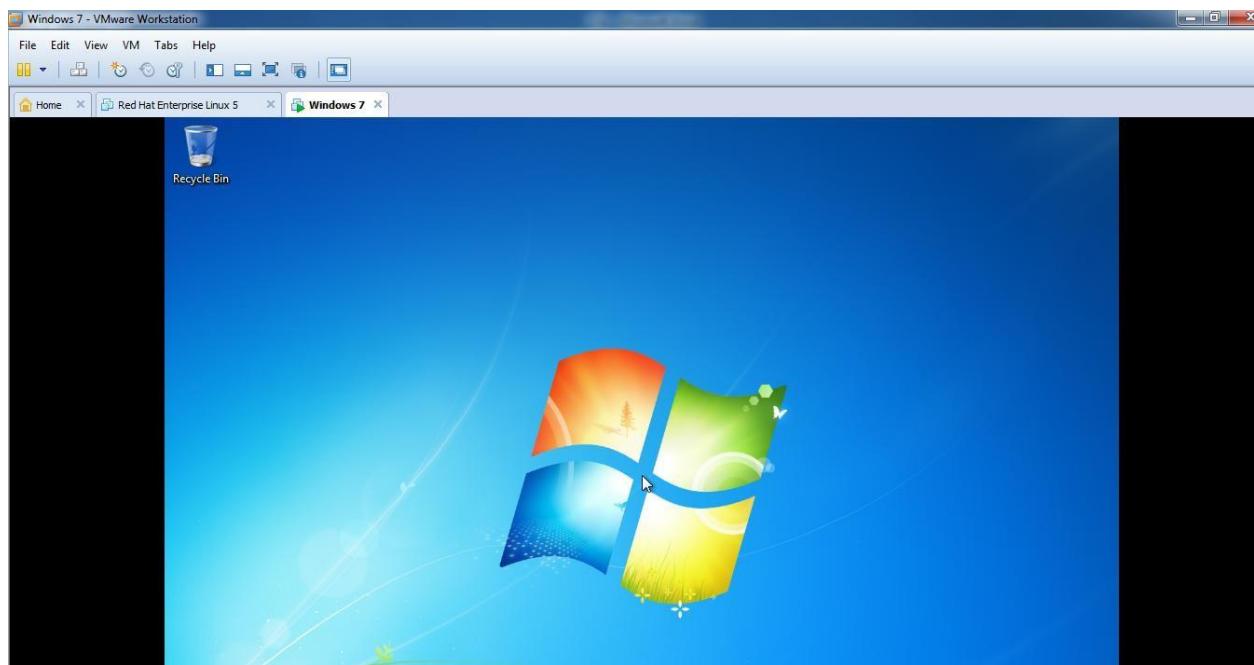
Step30: It will automatically shutdown.



Step31:It will start the windows.



Step32:Installation of Windows OS on Virtual Machine is completed.

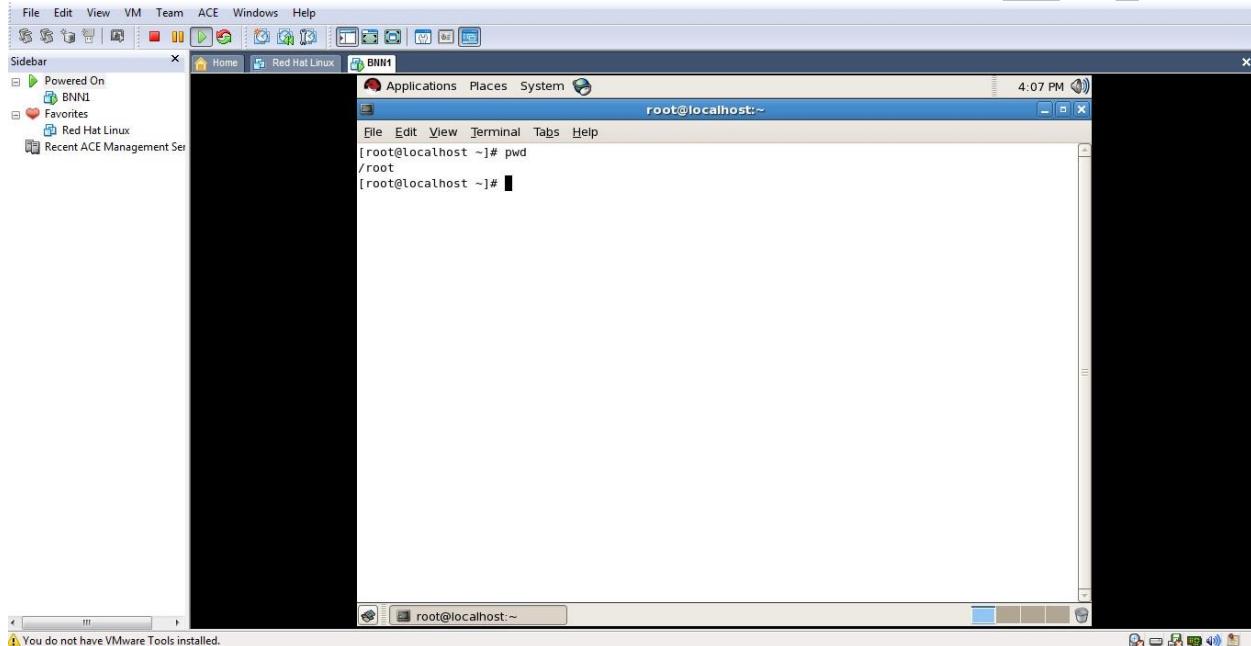


Operating Systems

PRACTICAL NO: 4

Aim: Linux Command : Working with Directories.

1.Pwd::‘pwd’ stands for ‘Print Working Directory‘ .As then a mestates ,command ‘pwd‘ prints the Current working directory or simply the directory user is,at present .It prints the current directory Name with the complete path starting from root(/).



2.Cd::cd is a Linux command to change the directory /folder of the terminal's shell. You can press the tab button in order to auto complete the directory name.

A screenshot of a Linux desktop environment, likely Red Hat Linux, running in a VMware window. The desktop has a standard panel with icons for Home, Red Hat Linux, and BNN1. A terminal window is open, showing the command line interface. The terminal title is "root@localhost:~/mahesh". The user is in the root directory (~) and runs the "ls" command, which lists several files and directories: abc, abcd.txt, bnnserver, fib.cpp~, hi.cpp~, java.txt, pqr, amit, Desktop, h, install.log, kmt, xyz, anaconda-ks.cfg, fib.cpp, hi.cpp, install.log.syslog, and mahesh. The terminal window has a status bar at the bottom indicating "root@localhost:~/" and a VMware message "You do not have VMware Tools installed." The desktop background is black.

```
[root@localhost ~]# ls
a  abcd.txt  bnnserver  fib.cpp~  hi.cpp~      java.txt  pqr
ab  amit     Desktop    h          install.log  kmt      xyz
abc anaconda-ks.cfg fib.cpp  hi.cpp   install.log.syslog mahesh
[root@localhost ~]# cd mahesh
[root@localhost mahesh]#
```

3. Ls::ls is a Linux shell command that lists directory contents of file sand directories.

A screenshot of a Linux desktop environment, likely Red Hat Linux, running in a VMware window. The desktop has a standard panel with icons for Home, Red Hat Linux, and BNN1. A terminal window is open, showing the command line interface. The terminal title is "root@localhost:~". The user is in the root directory (~) and runs the "ls" command, which lists several files and directories: abc, abcd.txt, bnnserver, fib.cpp~, hi.cpp~, java.txt, pqr, amit, Desktop, h, install.log, kmt, xyz, anaconda-ks.cfg, fib.cpp, hi.cpp, install.log.syslog, and mahesh. The terminal window has a status bar at the bottom indicating "root@localhost:~/" and a VMware message "You do not have VMware Tools installed." The desktop background is black.

```
[root@localhost ~]# ls
a  abcd.txt  bnnserver  fib.cpp~  hi.cpp~      java.txt  pqr
ab  amit     Desktop    h          install.log  kmt      xyz
abc anaconda-ks.cfg fib.cpp  hi.cpp   install.log.syslog mahesh
[root@localhost ~]#
```

4. Mkdir::The mkdir (makedirectory) command in the Unix, DOS, OS/2, and Microsoft

Windows operating systems and in the PHP scripting language is used to make a new directory.

```
[root@localhost ~]# ls
a  abcd.txt    bnnserver  fib.cpp~  hi.cpp~      java.txt  pqr
ab  amit       Desktop   fyit     hi.cpp~      install.log  kmt  xyz
abc anaconda-ks.cfg fib.cpp  hi.cpp  install.log.syslog  mahesh
[root@localhost ~]# mkdir fyit
[root@localhost ~]# ls
a  abcd.txt    bnnserver  fib.cpp~  hi.cpp      install.log.syslog  mahesh
ab  amit       Desktop   fyit     hi.cpp~      java.txt  pqr
abc anaconda-ks.cfg fib.cpp  h      install.log  kmt      xyz
[root@localhost ~]#
```

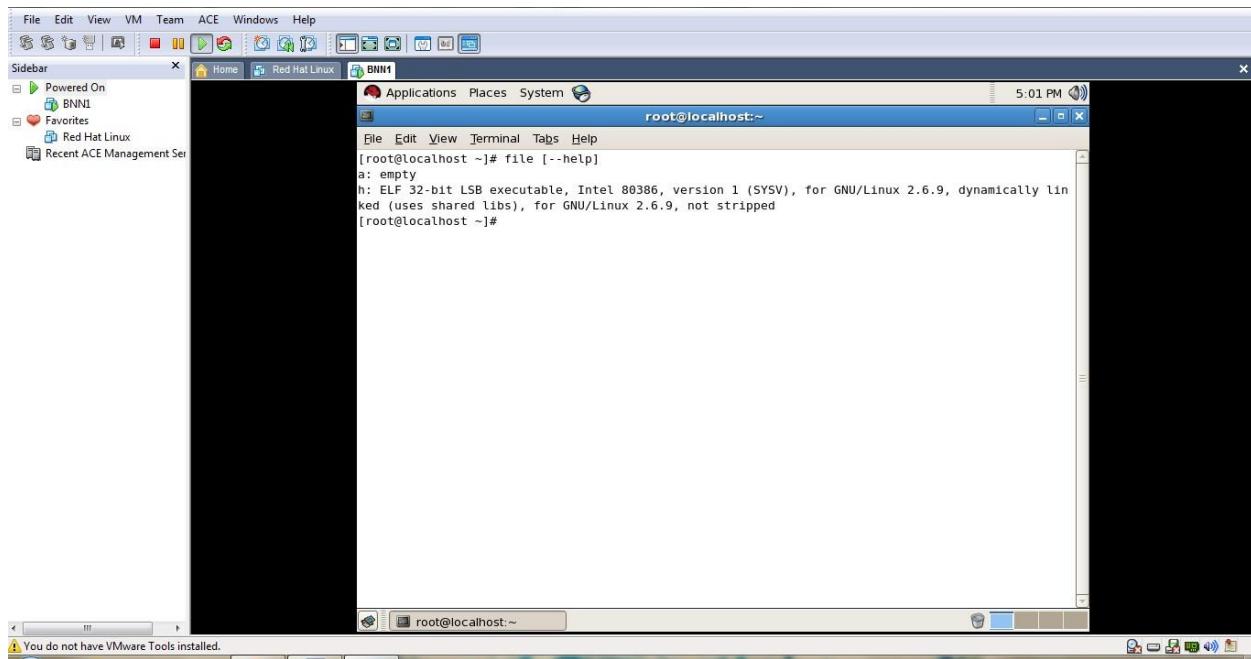
5.Rmdir::The rmdir utility removes the directory entry specified by each directory argument,

Provided the directory is empty.

```
[root@localhost ~]# ls
a  abcd.txt    bnnserver  fib.cpp~  hi.cpp~      java.txt  pqr
ab  amit       Desktop   fyit     hi.cpp~      install.log  kmt  xyz
abc anaconda-ks.cfg fib.cpp  hi.cpp  install.log.syslog  mahesh
[root@localhost ~]# rmdir fyit
[root@localhost ~]# ls
a  abcd.txt    bnnserver  fib.cpp~  hi.cpp~      java.txt  pqr
ab  amit       Desktop   h        install.log  kmt      xyz
abc anaconda-ks.cfg fib.cpp  hi.cpp  install.log.syslog  mahesh
[root@localhost ~]#
```

You do not have VMware Tools installed.

6.File::The file command issued to determine a file's **type**.The file command tests each argument in an attempt to classify it.



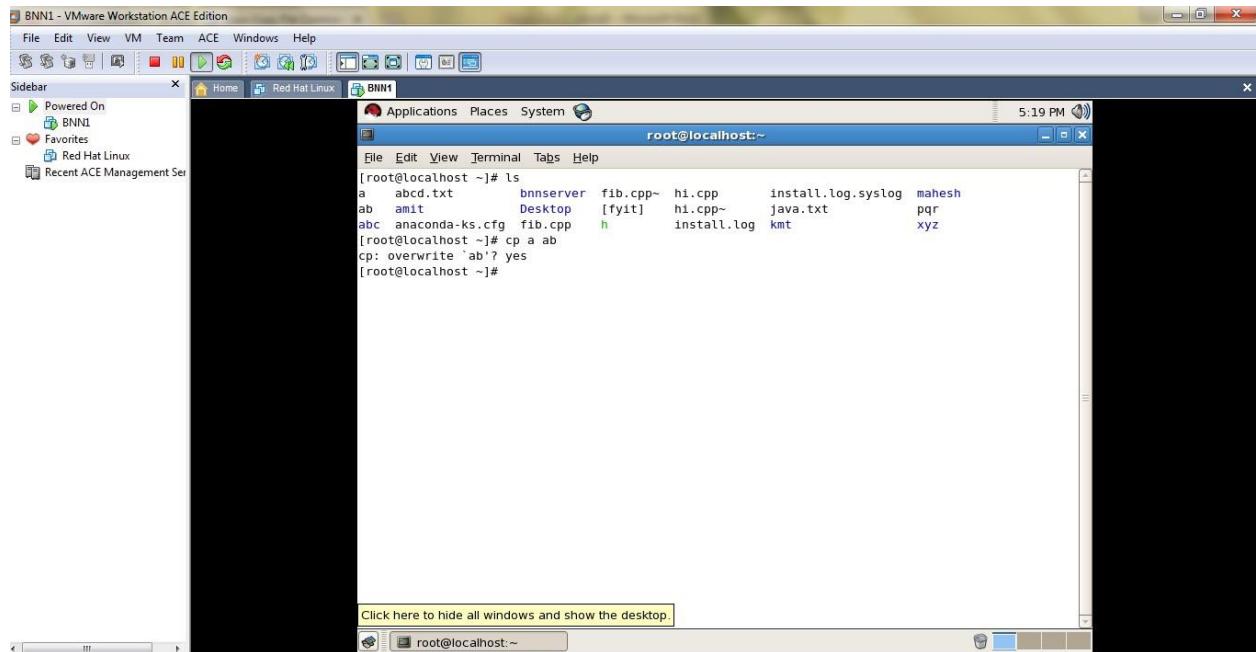
7.Touch::The touch command is the easiest way to create new,empty files.It is also used to change the time stamps (i.e.,date sand times of the most recent access and modification)on existing file sand directories.

```
[root@localhost ~]# ls
a      amit      fib.cpp  h      install.log.syslog  pqr
ab     anaconda-ks.cfg  fib.cpp~ hi.cpp  java.txt      xyz
abc    bnnserver  fyit    hi.cpp~ kmt
abcd.txt Desktop  [fyit]  hi.cpp~ install.log  mahesh
[root@localhost ~]# touch -m amit
[root@localhost ~]# touch -m fyit
[root@localhost ~]#
```

8.Rm ::The rm command removes(deletes) files or directories.rm removes each specified FILE.

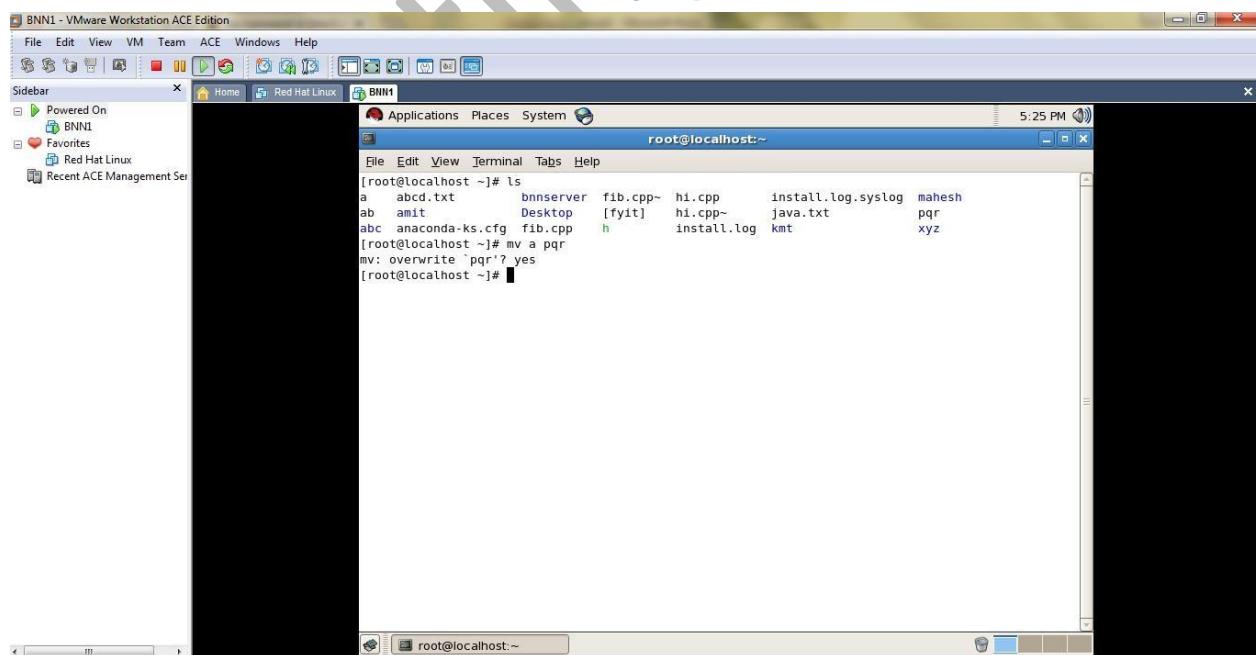
```
[root@localhost ~]# ls
a      abcd.txt  bnnserver  fib.cpp~  h      install.log      kmt      xyz
ab     amit       Desktop   fyit     hi.cpp  install.log.syslog  mahesh
abc    anaconda-ks.cfg  fib.cpp  [fyit]  hi.cpp~  java.txt      pqr
[root@localhost ~]# rm fyit
rm: remove regular empty file `fyit'? y
[root@localhost ~]# ls
a      abcd.txt  bnnserver  fib.cpp~  hi.cpp  install.log.syslog  mahesh
ab     amit       Desktop   [fyit]  hi.cpp~  java.txt      pqr
abc    anaconda-ks.cfg  fib.cpp  h      install.log  kmt      xyz
[root@localhost ~]#
```

9.Cp::To copy files and directories use the cp command under a Linux, UNIX-like, and BSD like operating systems.



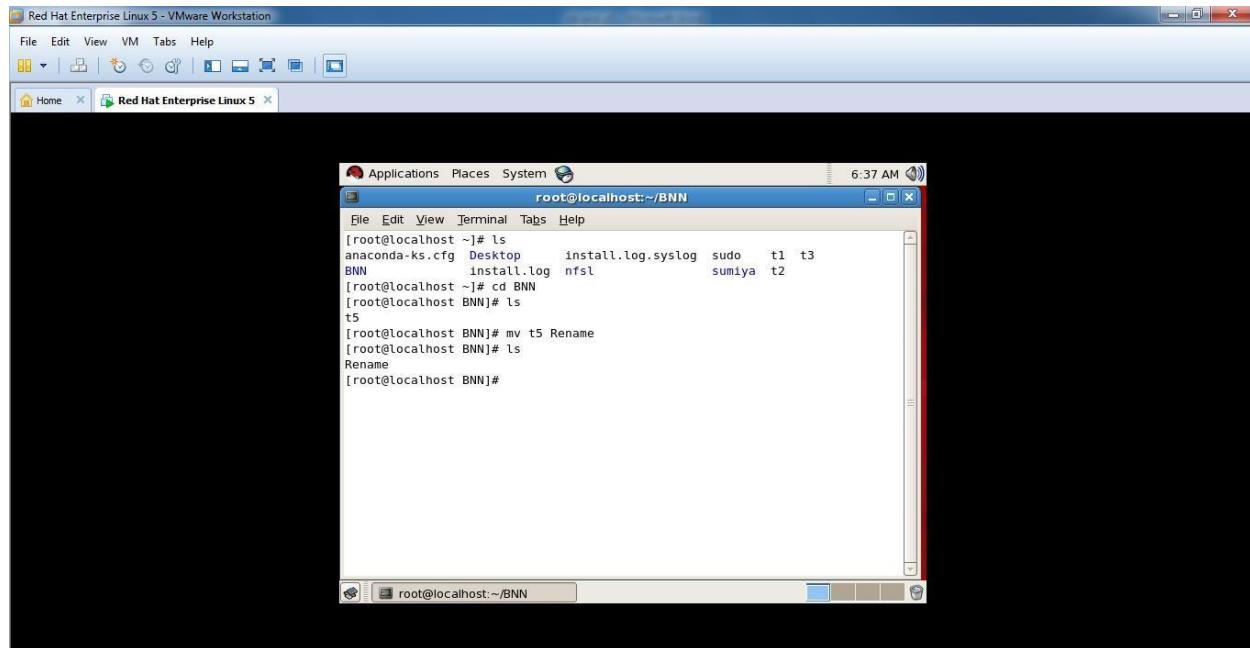
```
[root@localhost ~]# ls
a  abcd.txt  bnnserver  fib.cpp~  hi.cpp    install.log.syslog  mahesh
ab  amit     Desktop    [fyit]   hi.cpp~  java.txt      pqr
abc  anaconda-ks.cfg  fib.cpp  h      install.log  kmt      xyz
[root@localhost ~]# cp a ab
cp: overwrite `ab'? yes
[root@localhost ~]#
```

10. Mv ::The mv command is used to move or rename files.mv renames file SOURCE to DEST,Or moves the SOURCE file(or files)to DIRECTORY.



```
[root@localhost ~]# ls
a  abcd.txt  bnnserver  fib.cpp~  hi.cpp    install.log.syslog  mahesh
ab  amit     Desktop    [fyit]   hi.cpp~  java.txt      pqr
abc  anaconda-ks.cfg  fib.cpp  h      install.log  kmt      xyz
[root@localhost ~]# mv a pqr
mv: overwrite `pqr'? yes
[root@localhost ~]#
```

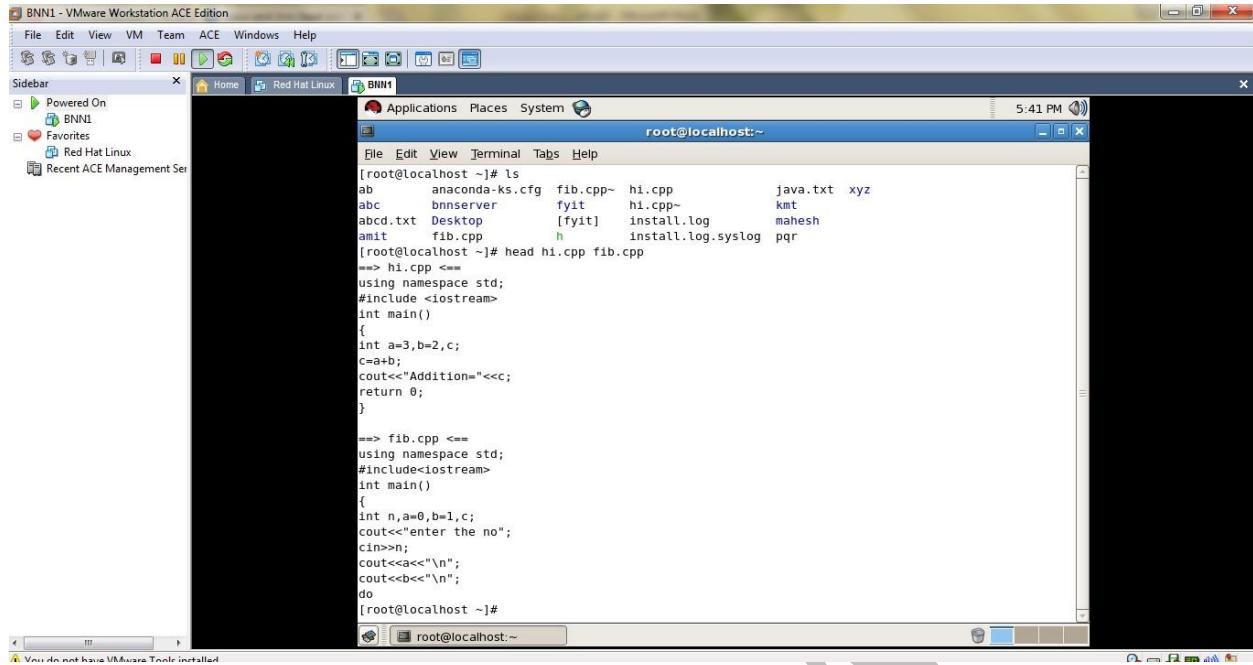
11. `Rename::`rename will rename the specified files by replacing the first occurrence of from in their name by to.



The screenshot shows a terminal window titled "Red Hat Enterprise Linux 5 - VMware Workstation". The window title bar includes "File Edit View VM Tabs Help" and a toolbar with icons for Home, Red Hat Enterprise Linux 5, and other applications. The terminal window has a menu bar with "Applications", "Places", "System", and "File Edit View Terminal Tabs Help". The status bar at the bottom shows "root@localhost:~/BNN" and the time "6:37 AM". The terminal content is as follows:

```
[root@localhost ~]# ls
anaconda-ks.cfg  Desktop  install.log.syslog  sudo  t1  t3
BNN               install.log  nfsl           sumiya  t2
[root@localhost ~]# cd BNN
[root@localhost BNN]# ls
t5
[root@localhost BNN]# mv t5 Rename
[root@localhost BNN]# ls
Rename
[root@localhost BNN]#
```

12. `Head::`The head command reads the first few lines of any text given to it as an input and Writes them to standard output(which,by default,is the display screen).

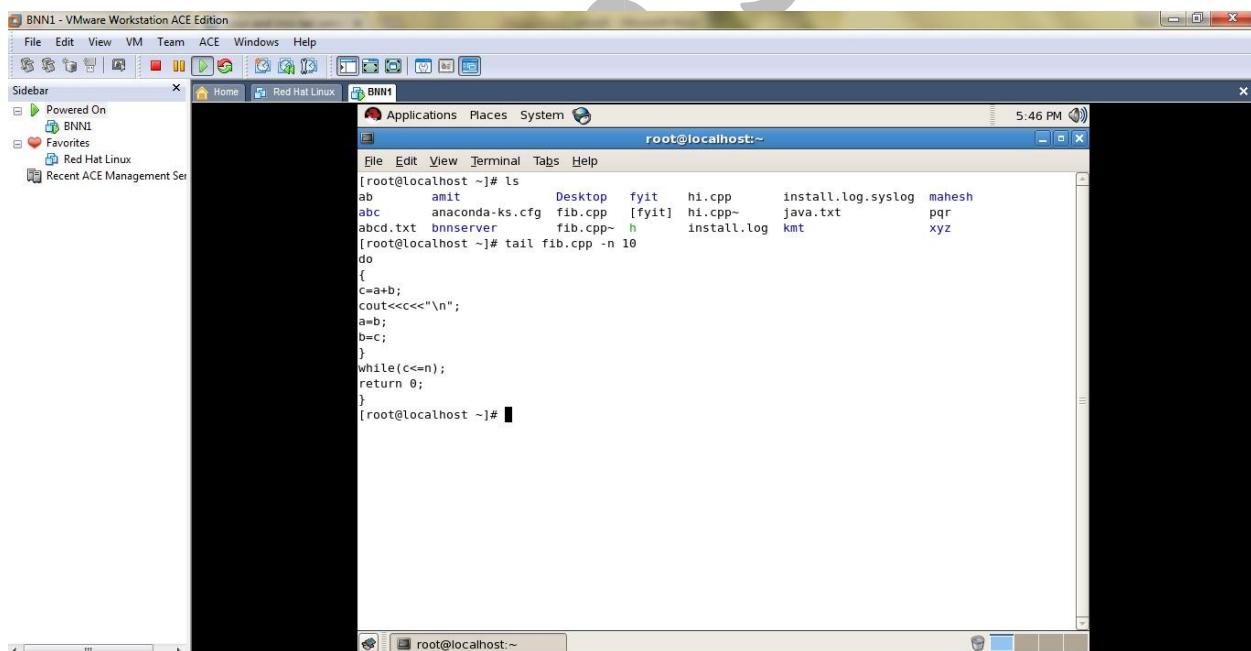


```
[root@localhost ~]# ls
ab      anaconda-ks.cfg  fib.cpp~  hi.cpp      java.txt  xyz
abc     bnnserver        fyit     hi.cpp~    kmt       mahesh
abcd.txt Desktop        fib.cpp~ [fyit]  install.log  pqr
amit   fib.cpp          h       install.log.syslog  xyz
[root@localhost ~]# head hi.cpp fib.cpp
==> hi.cpp <==
using namespace std;
#include<iostream>
int main()
{
int a=3,b=2,c;
c=a+b;
cout<<"Addition=<<c;
return 0;
}

==> fib.cpp <==
using namespace std;
#include<iostream>
int main()
{
int n,a=0,b=1,c;
cout<<"enter the no";
cin>>n;
cout<<a<<"\n";
cout<<b<<"\n";
do
[root@localhost ~]#

```

13. Tail::Tail prints the last 10 lines of each FILE to standard output. With more than one FILE, it Precedes each set of output with a header giving the file name.



```
[root@localhost ~]# ls
ab      amit      Desktop  fyit    hi.cpp      install.log.syslog  mahesh
abc     anaconda-ks.cfg  fib.cpp~ [fyit]  hi.cpp~    java.txt      pqr
abcd.txt bnnserver    fib.cpp~ h      install.log  kmt       xyz
[root@localhost ~]# tail fib.cpp -n 10
do
{
c=a+b;
cout<<c<<"\n";
a=b;
b=c;
}
while(c<=n);
return 0;
}
[root@localhost ~]#

```

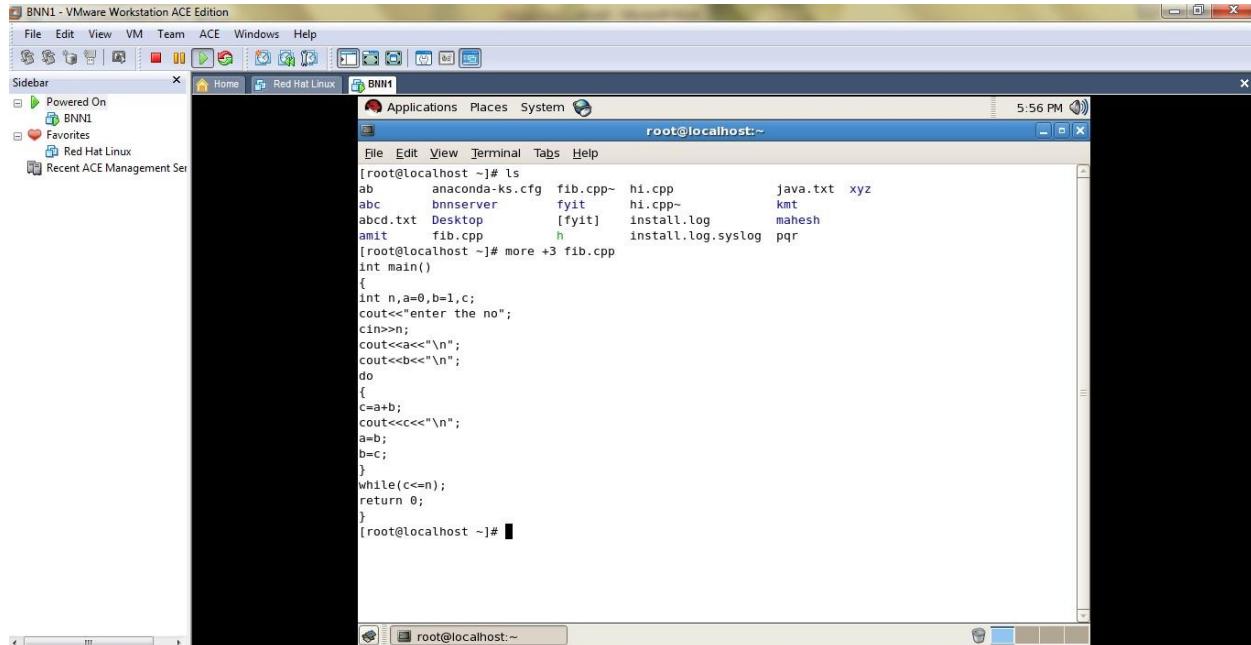
14. Cat::cat stands for "catenate" It reads data from files, and outputs their contents. It is the Simplest way to display the content so file at the command line.

```
[root@localhost ~]# ls
ab      anaconda-ks.cfg  fib.cpp~  hi.cpp      java.txt  xyz
abc     bnserver          fyit      hi.cpp~    kmt
abcd.txt Desktop         [fyit]   install.log  mahesh
amit    fib.cpp          h       install.log.syslog pqr
[root@localhost ~]# cat fib.cpp
using namespace std;
#include<iostream>
int main()
{
int n,a=0,b=1,c;
cout<<"enter the no";
cin>>n;
cout<<a<<"\n";
cout<<b<<"\n";
do
{
c=a+b;
cout<<c<<"\n";
a=b;
b=c;
}
while(c<=n);
return 0;
}
[root@localhost ~]#
```

15. Tac::: tac (which is "cat" backwards) concatenates each FILE to standard output just like the cat command, but in reverse: line-by-line, printing the last line first.

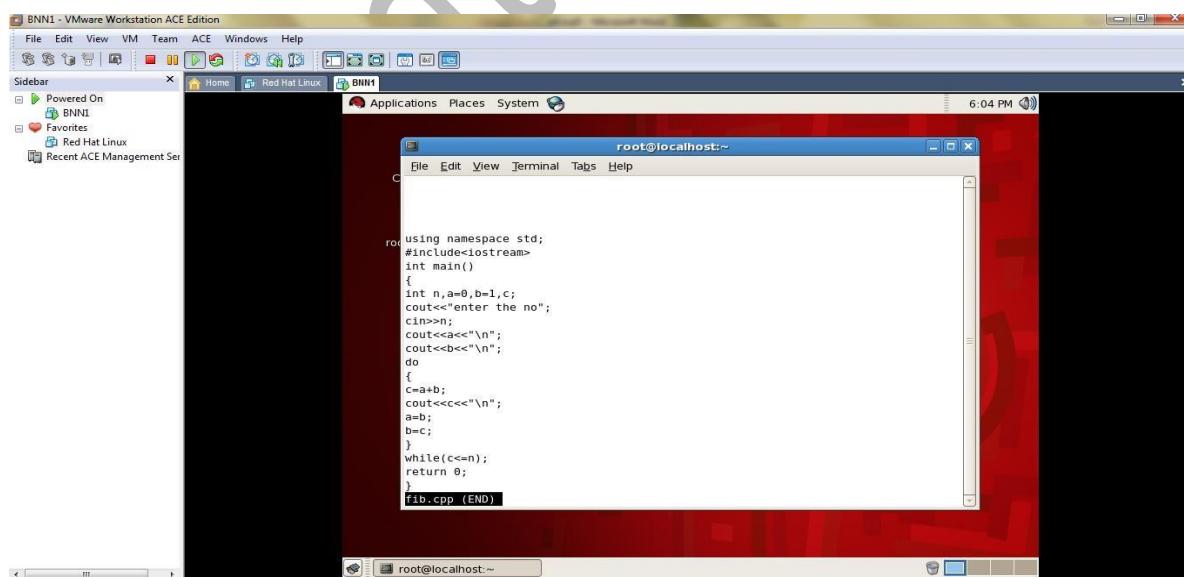
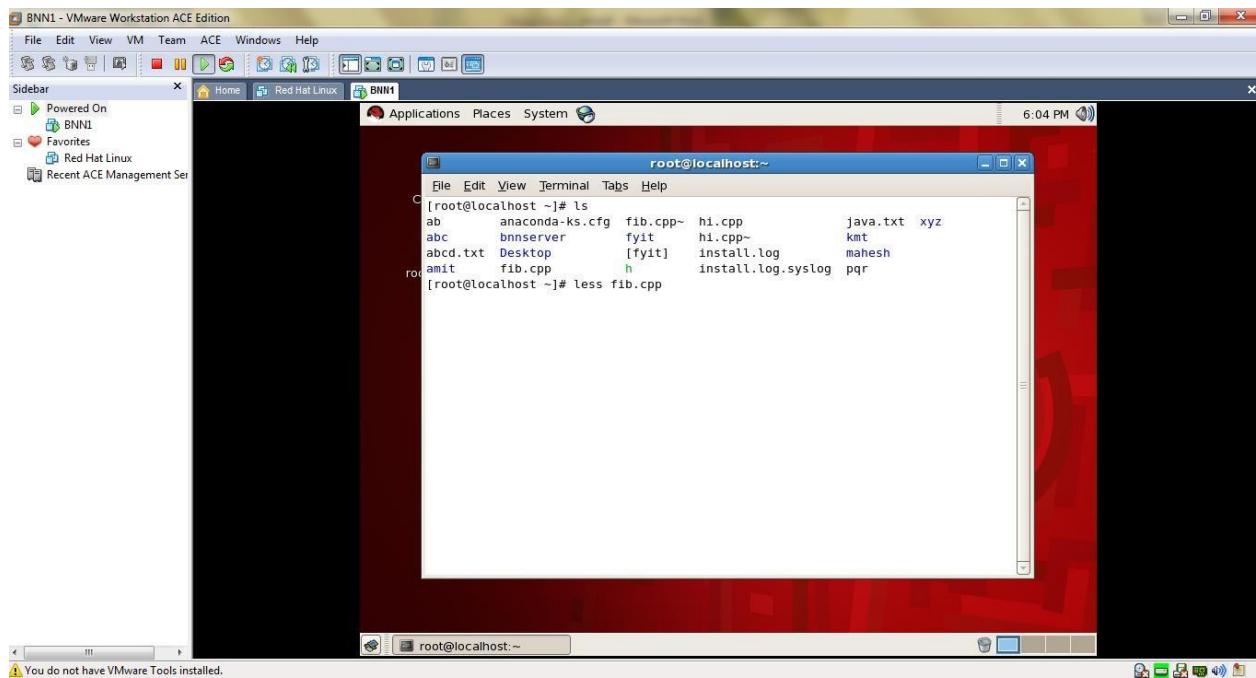
```
[root@localhost ~]# ls
ab      anaconda-ks.cfg  fib.cpp~  hi.cpp      java.txt  xyz
abc     bnserver          fyit      hi.cpp~    kmt
abcd.txt Desktop         [fyit]   install.log  mahesh
amit    fib.cpp          h       install.log.syslog pqr
[root@localhost ~]# tac fib.cpp
}
return 0;
while(c<=n);
}
b=c;
a=b;
cout<<a<<"\n";
cout<<b<<"\n";
do
cout<<c<<"\n";
cout<<a<<"\n";
cin>>n;
cout<<"enter the no";
int n,a=0,b=1,c;
{
int main()
#include<iostream>
using namespace std;
[root@localhost ~]#
```

16.More::More is a filter for paging through text on screen at a time. It does not provide as many options or enhancements as less, but is never the less quite useful and simple to use.

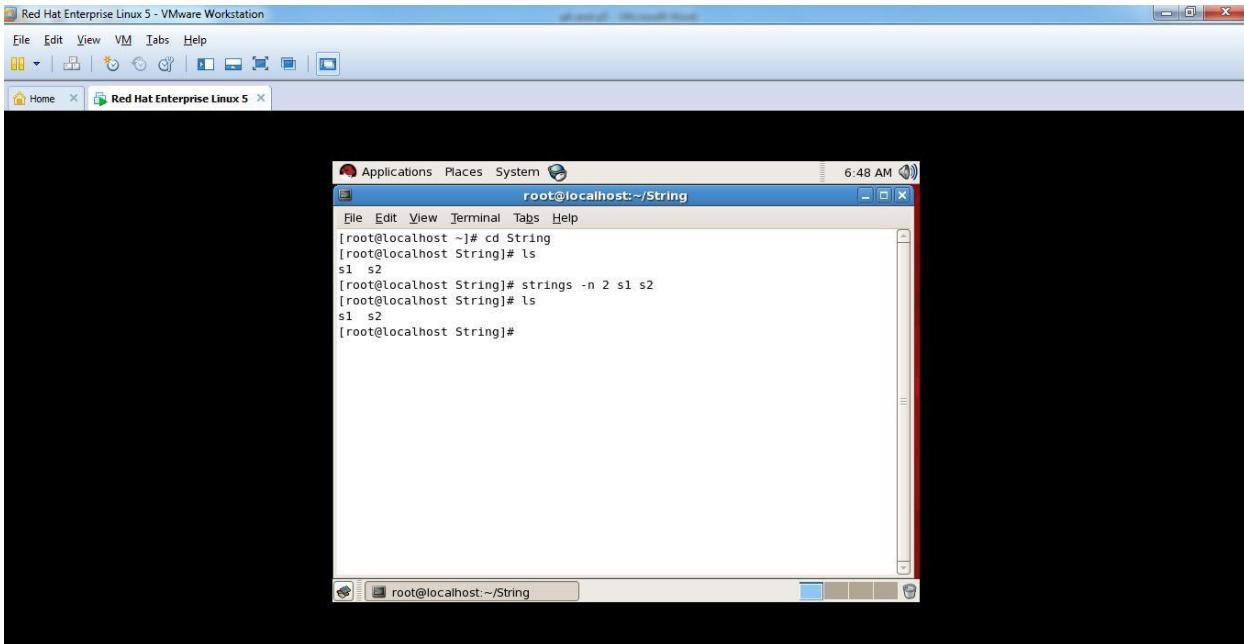


```
[root@localhost ~]# ls
ab      anaconda-ks.cfg  fib.cpp    hi.cpp        java.txt xyz
abc     bnnserver        fyit      hi.cpp~
abcd.txt Desktop        [fyit]    install.log   mahesh
amit   fib.cpp          h       install.log.syslog pqr
[root@localhost ~]# more +3 fib.cpp
int main()
{
int n,a=0,b=1,c;
cout<<"enter the no";
cin>>n;
cout<<a<<"\n";
cout<<b<<"\n";
do
{
c=a+b;
cout<<c<<"\n";
a=b;
b=c;
}
while(c<=n);
return 0;
}
[root@localhost ~]#
```

17.Less::less is a simple, feature-rich command-line file viewer. less is a program similar to more, but it has many more features.



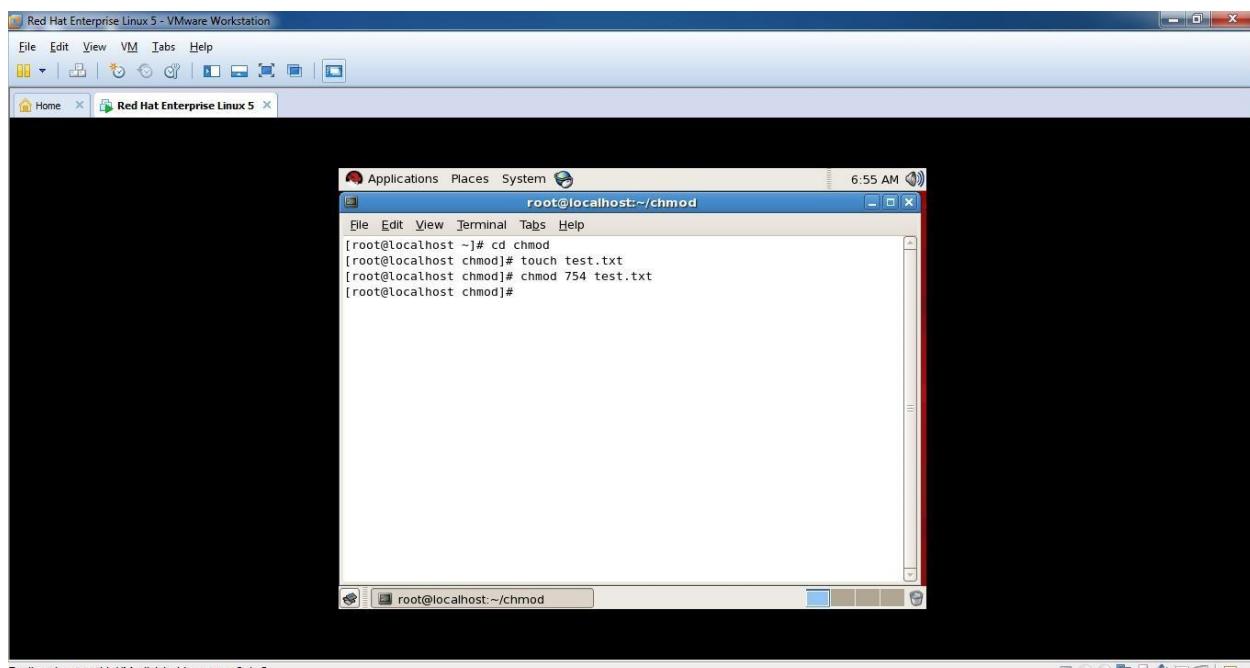
18. String:The strings command returns each string of printable characters in files. Its main uses are to determine the contents of and to extract text from binary files.



A screenshot of a Red Hat Enterprise Linux 5 terminal window titled "Red Hat Enterprise Linux 5 - VMware Workstation". The window shows a terminal session with the root user at localhost. The user runs the command "cd String" to change directory to "/String". Then, they run "ls" to list files s1 and s2. Finally, they run "strings -n 2 s1 s2" to extract strings from files s1 and s2. The output shows two lines of text: "s1 s2".

```
root@localhost:~/String
[1]# cd String
[2]# ls
s1 s2
[3]# strings -n 2 s1 s2
[4]# ls
s1 s2
[5]#
```

19. Chmod::chmod is the command and system call which may change the access permissions to file system objects(file sand directories).



A screenshot of a Red Hat Enterprise Linux 5 terminal window titled "Red Hat Enterprise Linux 5 - VMware Workstation". The window shows a terminal session with the root user at localhost. The user runs "cd chmod" to change directory to "/chmod". Then, they run "touch test.txt" to create a file named "test.txt". Finally, they run "chmod 754 test.txt" to change the permissions of "test.txt" to 754. The output shows the command and its execution.

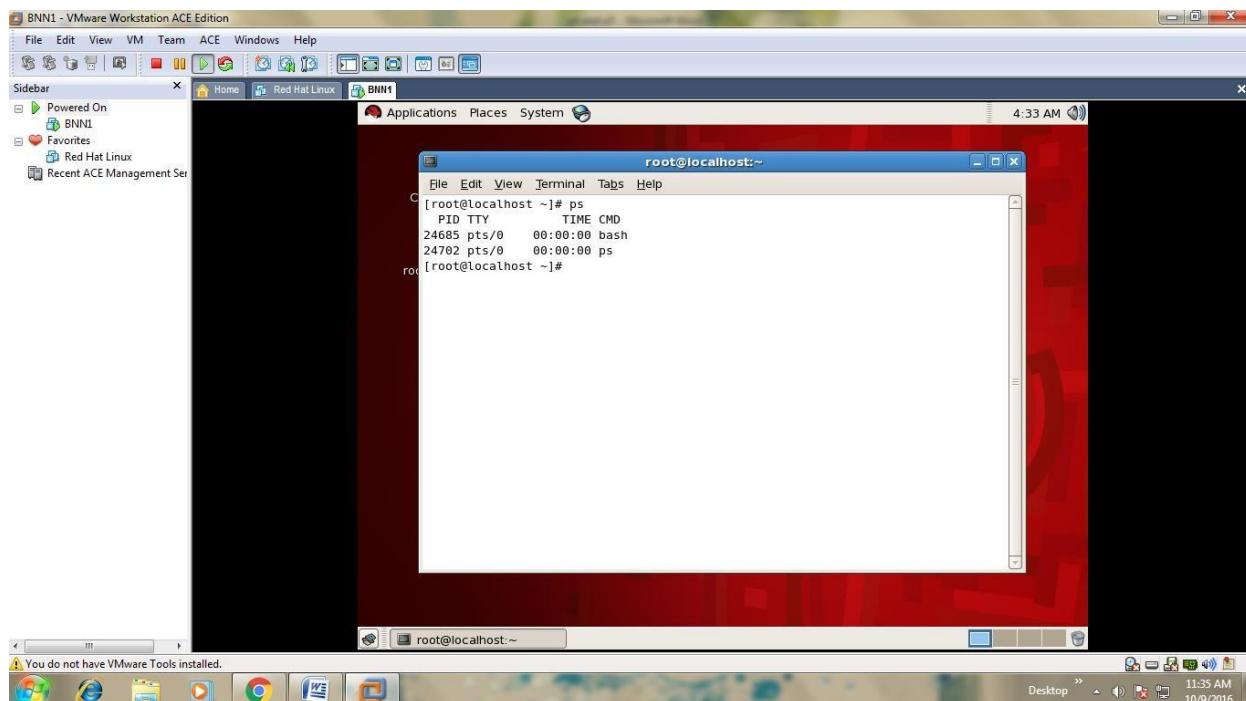
```
root@localhost:~/chmod
[1]# cd chmod
[2]# touch test.txt
[3]# chmod 754 test.txt
[4]#
```

To direct input to this VM, click inside or press Ctrl+G.

PRACTICAL NO.:5

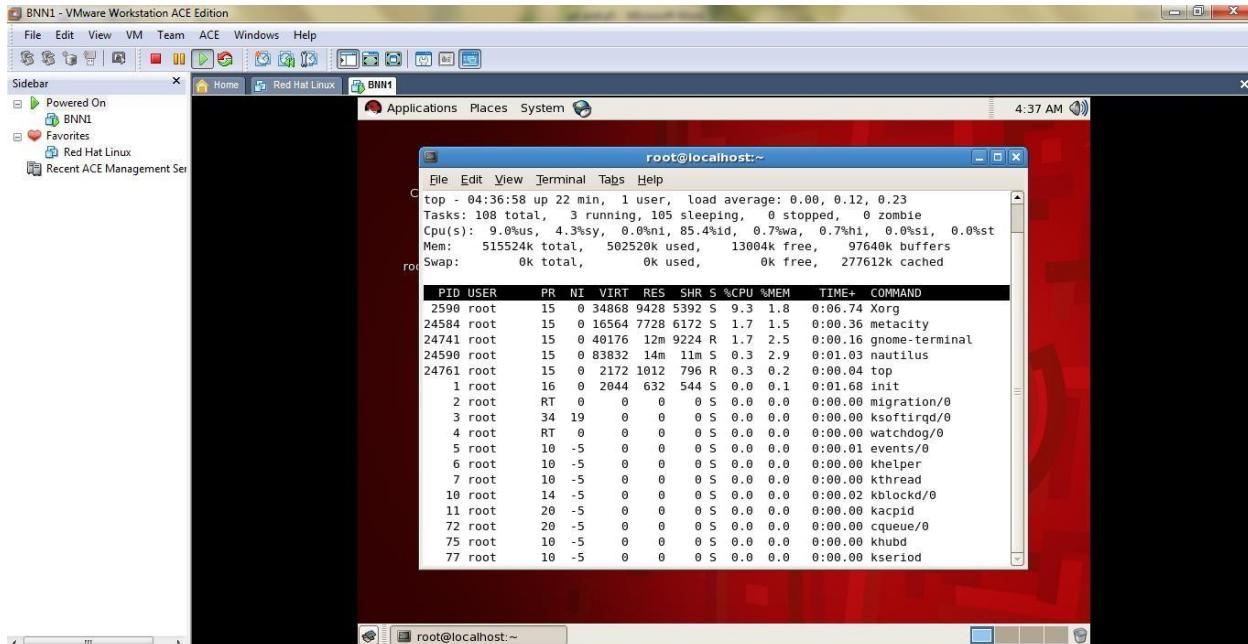
Aim:Linux Command: Working with Files.

1.ps::PS gives a snapshots of the current process. It will “capture” the system condition at a single time.

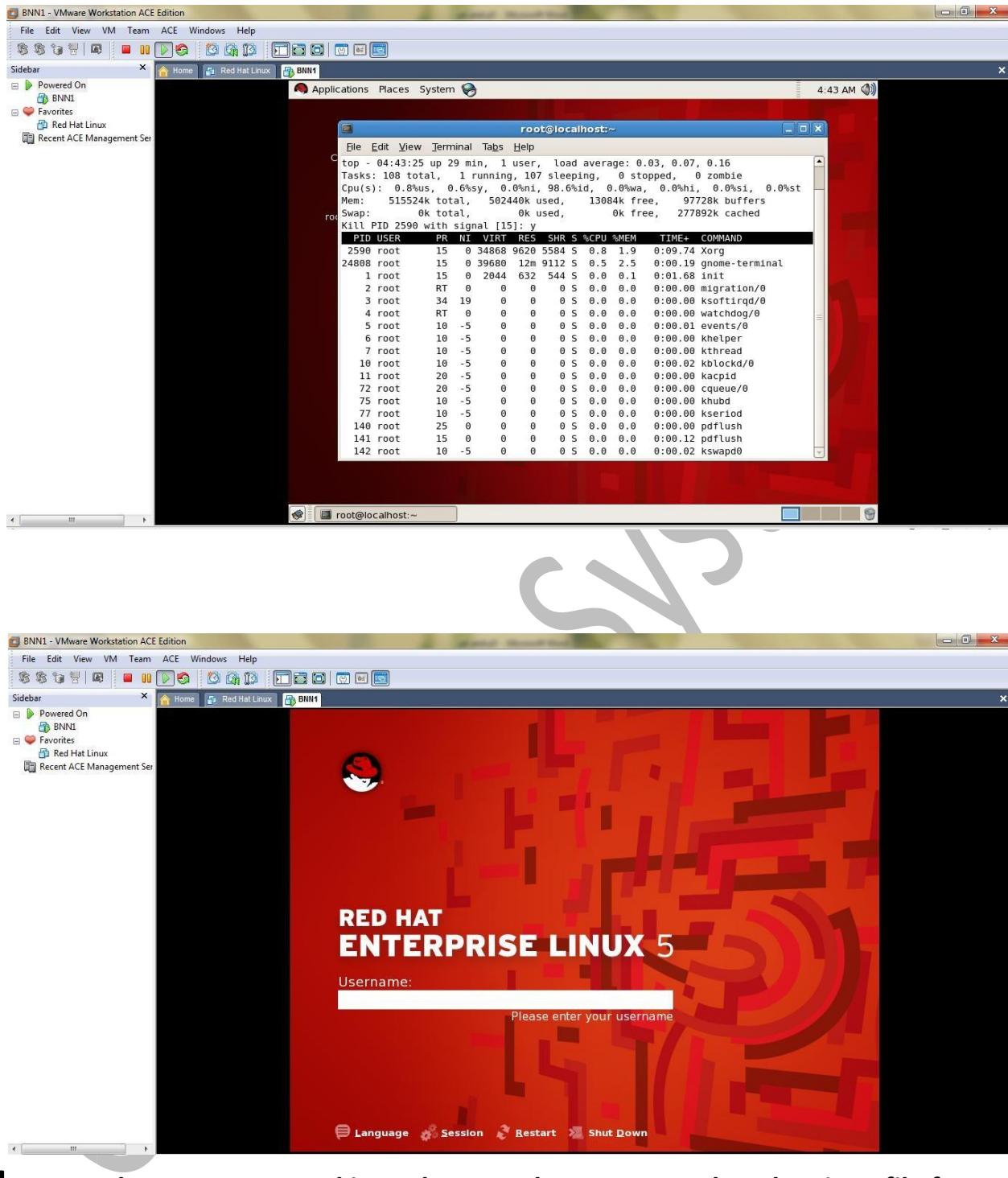


2.top::The top program provides a dynamic real-time view of a running system.

It can display system summary information, as well as a list of processes or threads currently being managed by the kernel.



3.kill::The Kill command in unix or linux operating system is used to send a signal to the specified process or group. If we don't specify any signal, then the kill command passes the SIGTERM signal.



4.grep::The grep command is used to search text or searches the given file for lines containing at ch to the given strings or words.

A screenshot of a Red Hat Enterprise Linux 5 terminal window titled "root@localhost:~/grep". The window shows the following command and output:

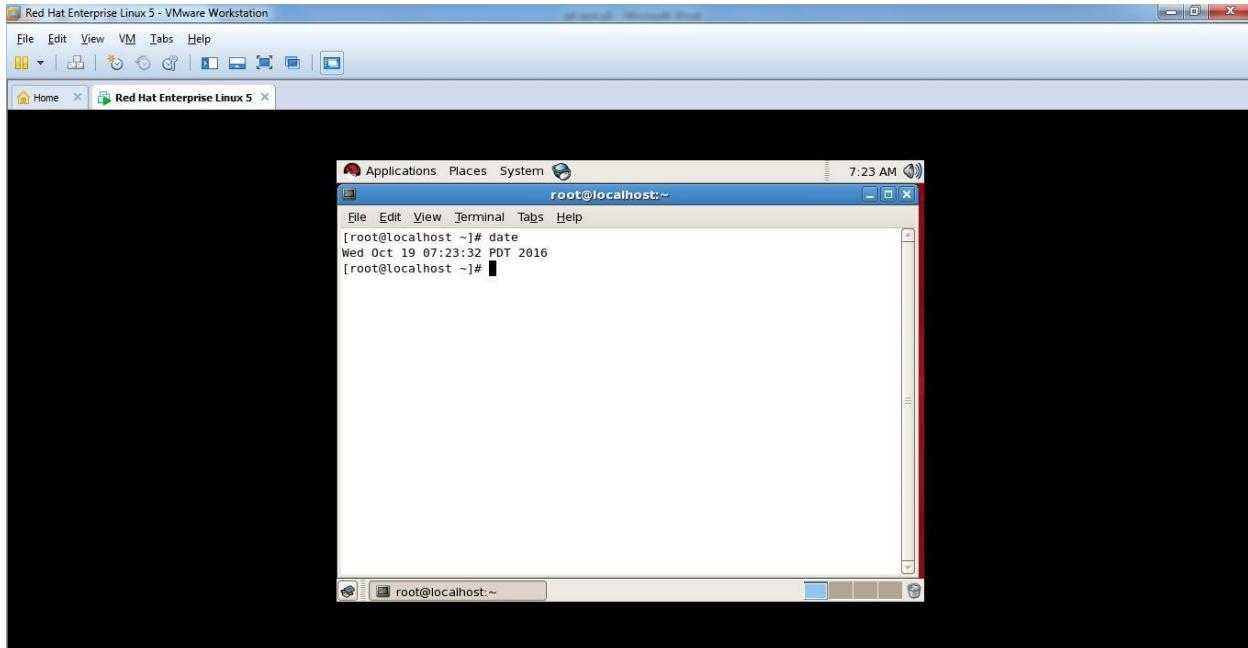
```
[root@localhost ~]# cd grep  
[root@localhost grep]# grep language grep.txt  
Linux is very friendly language.  
[root@localhost grep]#
```

5.find::Find is a command-line utility that searches one or more directorytrees of a filesystem, locates files based on some userspecified criteria and applies a user specified action one a ch matched file.

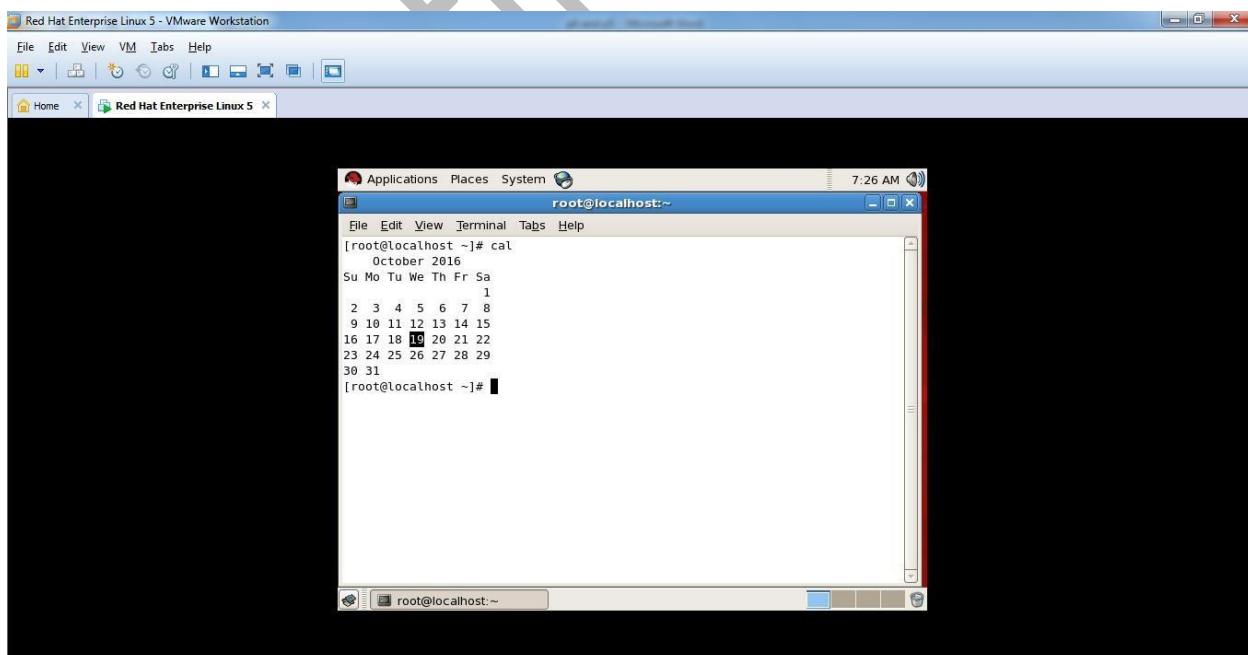
A screenshot of a Red Hat Enterprise Linux 5 terminal window titled "root@localhost:~". The window shows the following command and output:

```
[root@localhost ~]# ls  
anaconda-ks.cfg  grep          nfsl    sudo   t3  t7  
BNN             install.log    s1      sumiya t4  t8  
chmod           install.log.syslog s2      t1    t5 test.txt  
Desktop         locate        String  t2    t6  
[root@localhost ~]# find t3  
t3  
[root@localhost ~]# find test.txt  
test.txt  
[root@localhost ~]#
```

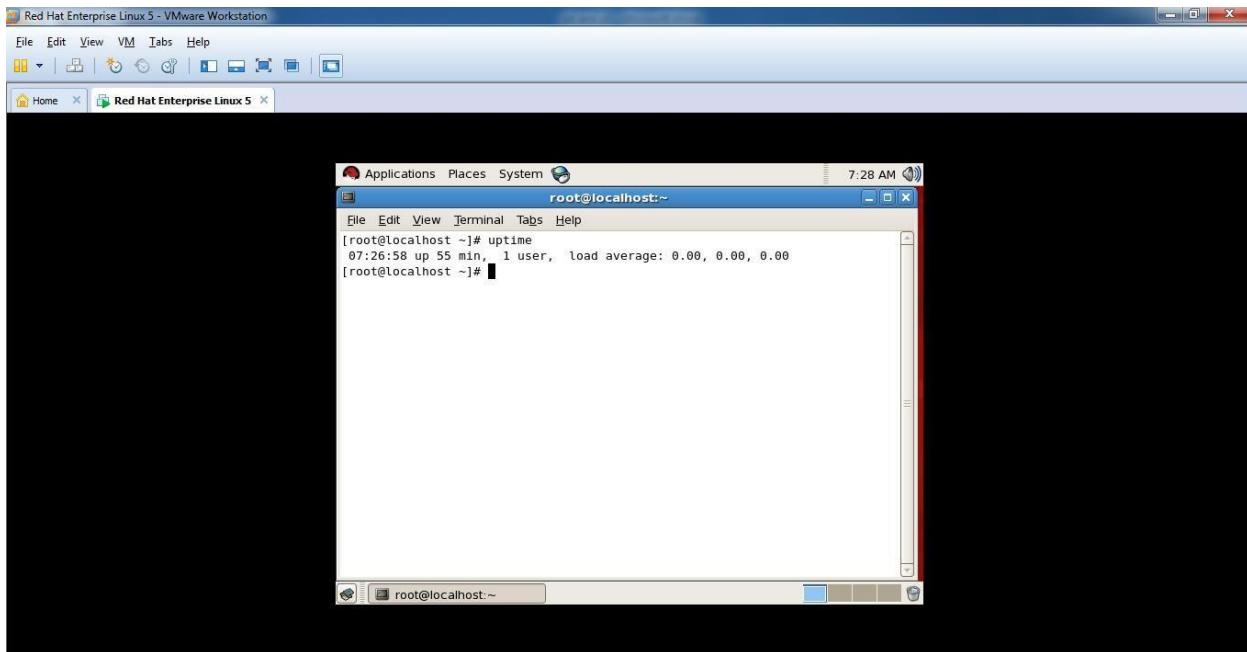
6.date::The date command is used to printout, or change the value of, the system's time and date information.



7. cal::Display a conveniently-form attend calendar from the command line.



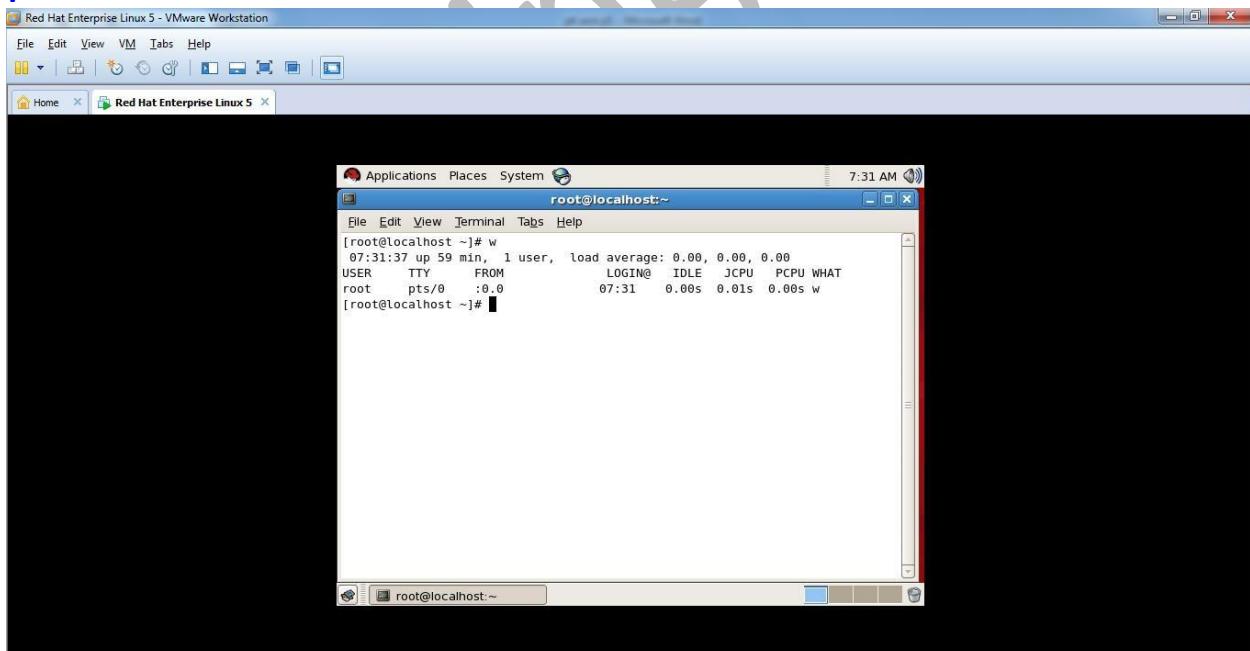
8.uptime::Uptime tells you how long the system has been running.



A screenshot of a Red Hat Enterprise Linux 5 desktop environment within a VMware Workstation window. The desktop has a blue header bar with icons for File, Edit, View, VM, Tabs, and Help. A taskbar at the bottom shows 'Home' and 'Red Hat Enterprise Linux 5'. In the center, a terminal window titled 'root@localhost:~' is open. The terminal shows the command 'uptime' being run and its output: '07:26:58 up 55 min, 1 user, load average: 0.00, 0.00, 0.00'. The time '7:28 AM' is displayed in the top right corner of the terminal window.

```
[root@localhost ~]# uptime
07:26:58 up 55 min, 1 user, load average: 0.00, 0.00, 0.00
[root@localhost ~]#
```

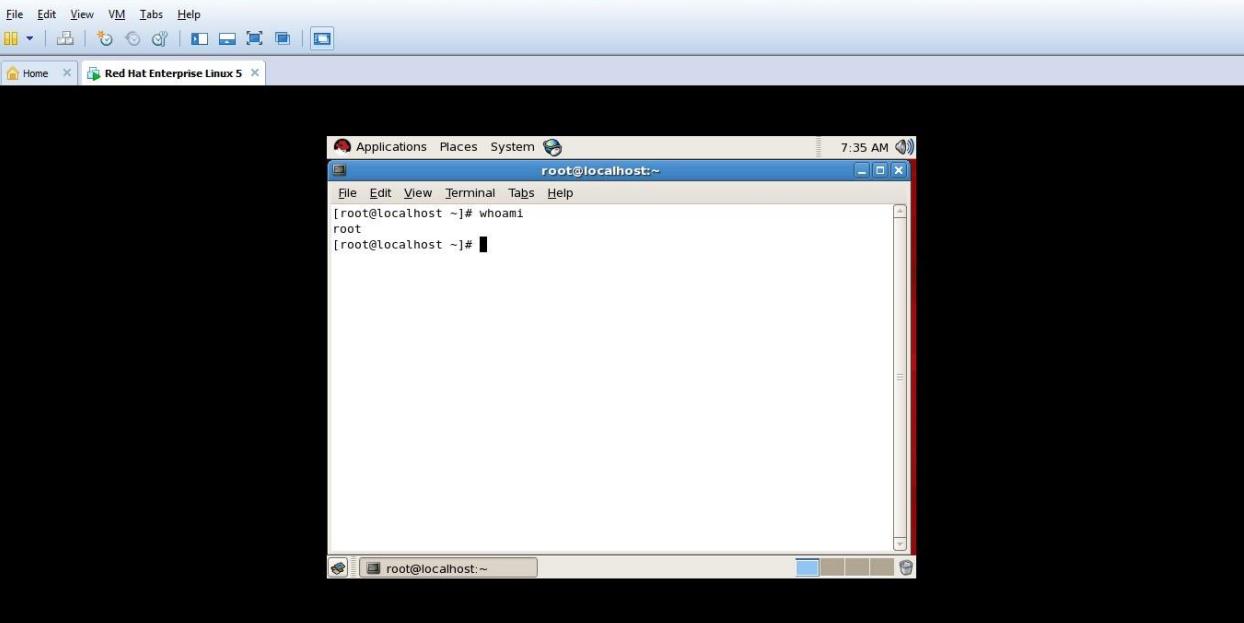
9.w::The w command is a quick way to see who is **logged on** and what they are doing. w displays information about the users currently on the machine, and their processes.



A screenshot of a Red Hat Enterprise Linux 5 desktop environment within a VMware Workstation window. The desktop has a blue header bar with icons for File, Edit, View, VM, Tabs, and Help. A taskbar at the bottom shows 'Home' and 'Red Hat Enterprise Linux 5'. In the center, a terminal window titled 'root@localhost:~' is open. The terminal shows the command 'w' being run and its output: '07:31:37 up 59 min, 1 user, load average: 0.00, 0.00, 0.00'. It then lists the user 'root' with TTY 'pts/0', FROM ':0.0', LOGIN@ '07:31', IDLE '0.00s', JCPU '0.01s', PCPU '0.00s', and WHAT 'w'. The time '7:31 AM' is displayed in the top right corner of the terminal window.

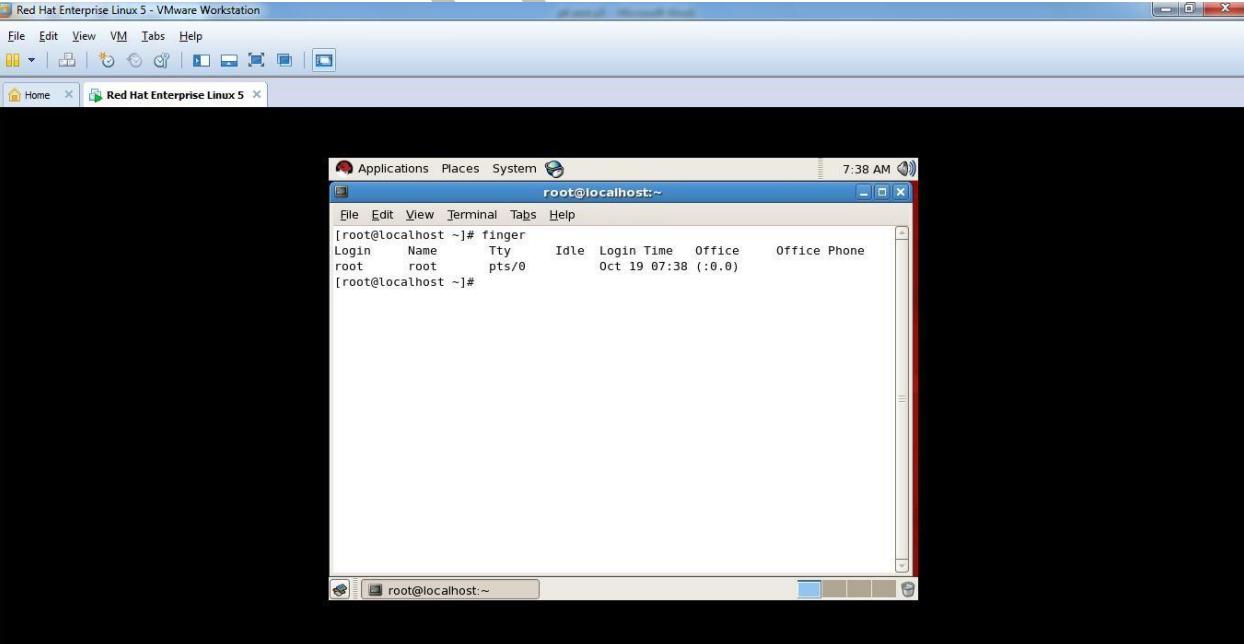
```
[root@localhost ~]# w
07:31:37 up 59 min, 1 user, load average: 0.00, 0.00, 0.00
USER     TTY      FROM          LOGIN@   IDLE    JCPU   PCPU WHAT
root     pts/0    :0.0          07:31    0.00s  0.01s  0.00s w
[root@localhost ~]#
```

10. whoami::whoami prints the effective userID. This command prints the Username associated with the current effective userID.



The screenshot shows a terminal window titled "root@localhost:~". The window is part of the "Red Hat Enterprise Linux 5" desktop environment. The terminal displays the command "[root@localhost ~]# whoami" followed by the output "root". The desktop interface includes a menu bar with "File", "Edit", "View", "VM", "Tabs", and "Help". A system tray icon is visible in the bottom right corner. The status bar at the bottom shows "root@localhost:~".

11. finger::Finger is a program you can use to find information about computer users. It usually lists the login name, the full name, and possibly other details about the user you are fingering.

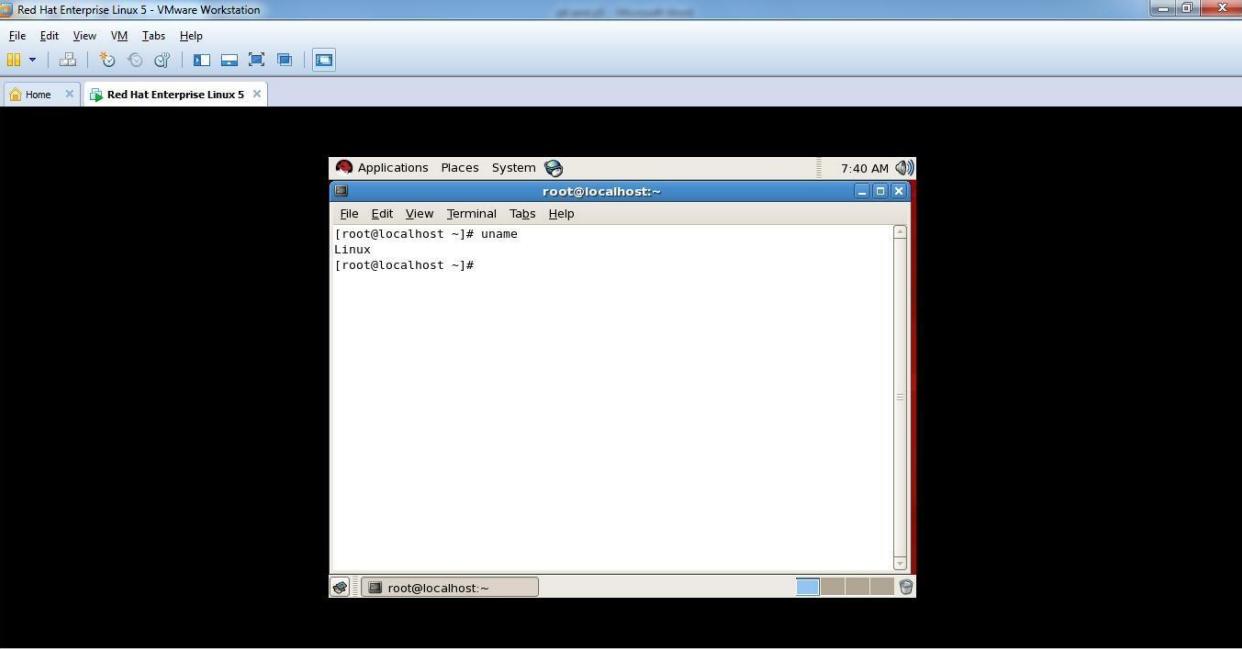


The screenshot shows a terminal window titled "root@localhost:~". The window is part of the "Red Hat Enterprise Linux 5" desktop environment. The terminal displays the command "[root@localhost ~]# finger" followed by the output:

Login	Name	Tty	Idle	Login Time	Office	Office Phone
root	root	pts/0		Oct 19 07:38 (:0.0)		

The desktop interface includes a menu bar with "File", "Edit", "View", "VM", "Tabs", and "Help". A system tray icon is visible in the bottom right corner. The status bar at the bottom shows "root@localhost:~".

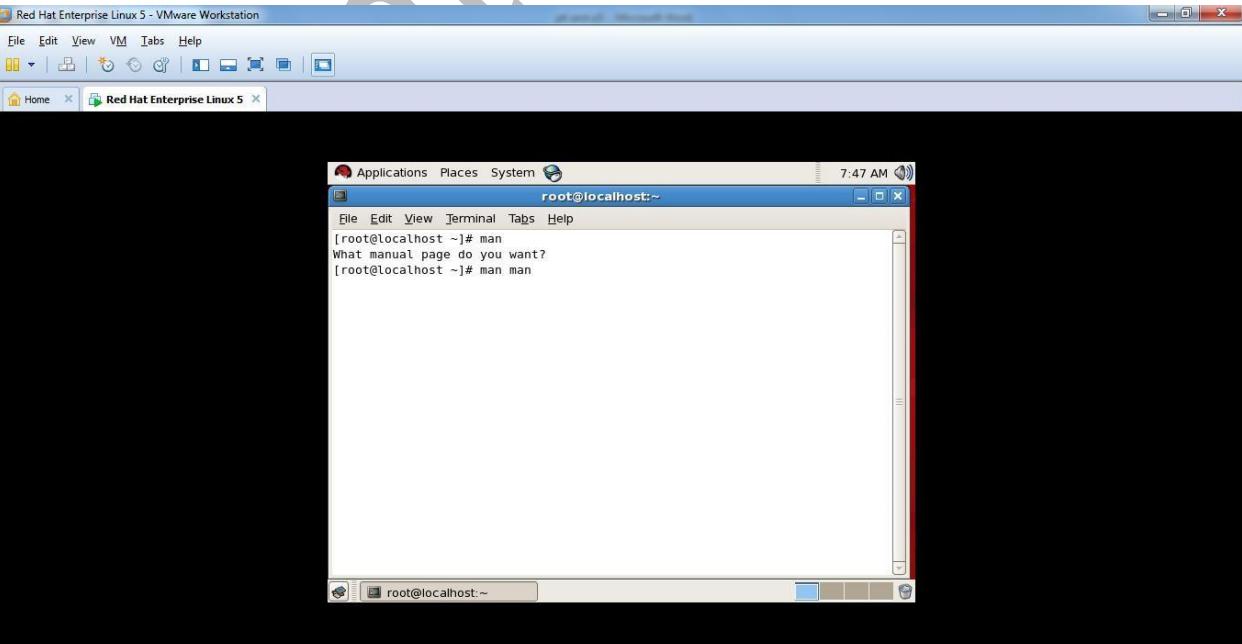
12. uname::Print information about the current system.



A screenshot of a Red Hat Enterprise Linux 5 desktop environment running in a VMware Workstation window. The desktop has a blue top bar with icons for File, Edit, View, VM, Tabs, and Help. A taskbar at the bottom shows 'Home' and 'Red Hat Enterprise Linux 5'. In the center, there's a terminal window titled 'root@localhost:~'. The terminal shows the command 'uname' being run, with the output 'Linux' displayed. The desktop environment includes a menu bar with Applications, Places, System, and a clock showing 7:40 AM.

```
[root@localhost ~]# uname
Linux
[root@localhost ~]#
```

13. man::On [Linux](#) and other [Unix](#)-like operating systems, man is the interface used to view the system's reference manuals.



A screenshot of a Red Hat Enterprise Linux 5 desktop environment running in a VMware Workstation window. The desktop has a blue top bar with icons for File, Edit, View, VM, Tabs, and Help. A taskbar at the bottom shows 'Home' and 'Red Hat Enterprise Linux 5'. In the center, there's a terminal window titled 'root@localhost:~'. The terminal shows the command 'man' being run, followed by the question 'What manual page do you want?'. The desktop environment includes a menu bar with Applications, Places, System, and a clock showing 7:47 AM.

```
[root@localhost ~]# man
What manual page do you want?
[root@localhost ~]# man man
```

Red Hat Enterprise Linux 5 - VMware Workstation

File Edit View VM Tabs Help

Home Red Hat Enterprise Linux 5

root@localhost:~ 7:48 AM

```
man(1)
1)

NAME
    man - format and display the on-line manual pages

SYNOPSIS
    man [-acdfFhKtW] [--path] [-m system] [-p string] [-C config_file]
        [-M pathlist] [-P pager] [-B browser] [-H html-pager] [-S section_list]
        [section] name ...

DESCRIPTION
    man formats and displays the on-line manual pages. If you specify section, man only looks in that section of the manual. name is normally the name of the manual page, which is typically the name of a command, function, or file. However, if name contains a slash (/) then man interprets it as a file specification, so that you can do man ./foo.5 or even man /cd/foo/bar.1.gz.

    See below for a description of where man looks for the manual
```

root@localhost:~

14.df:The df command reports the amount of available **disk** space being used by **file systems**.

Red Hat Enterprise Linux 5 - VMware Workstation

File Edit View VM Tabs Help

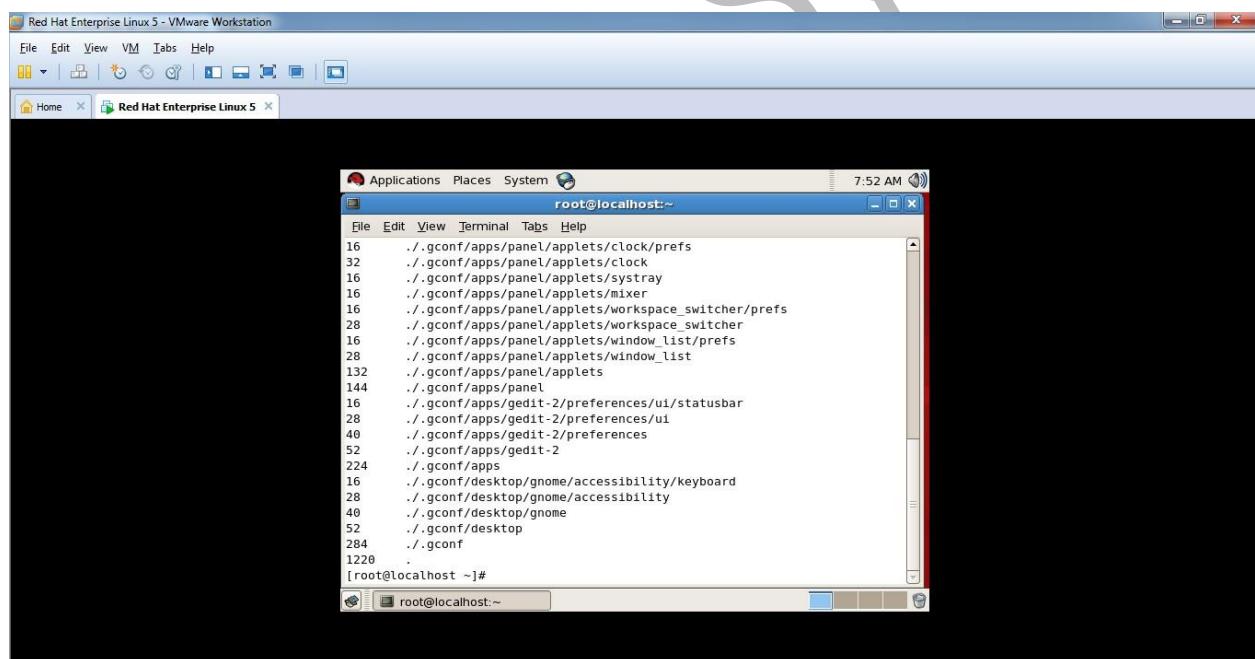
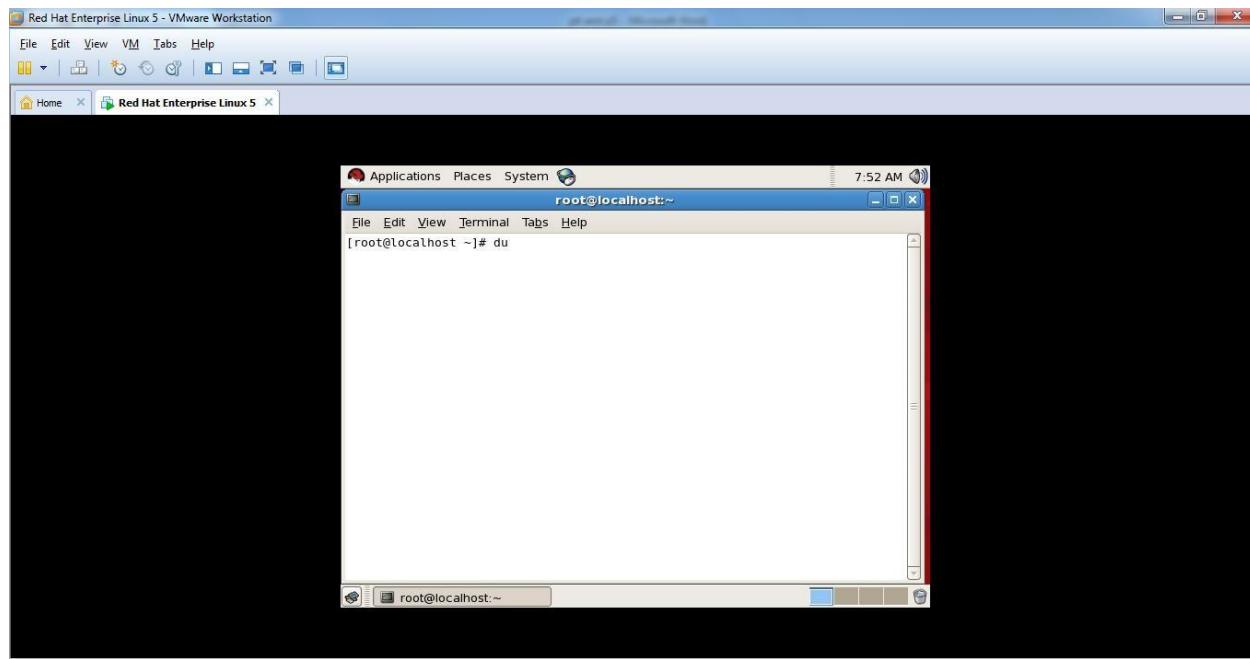
Home Red Hat Enterprise Linux 5

root@localhost:~ 7:50 AM

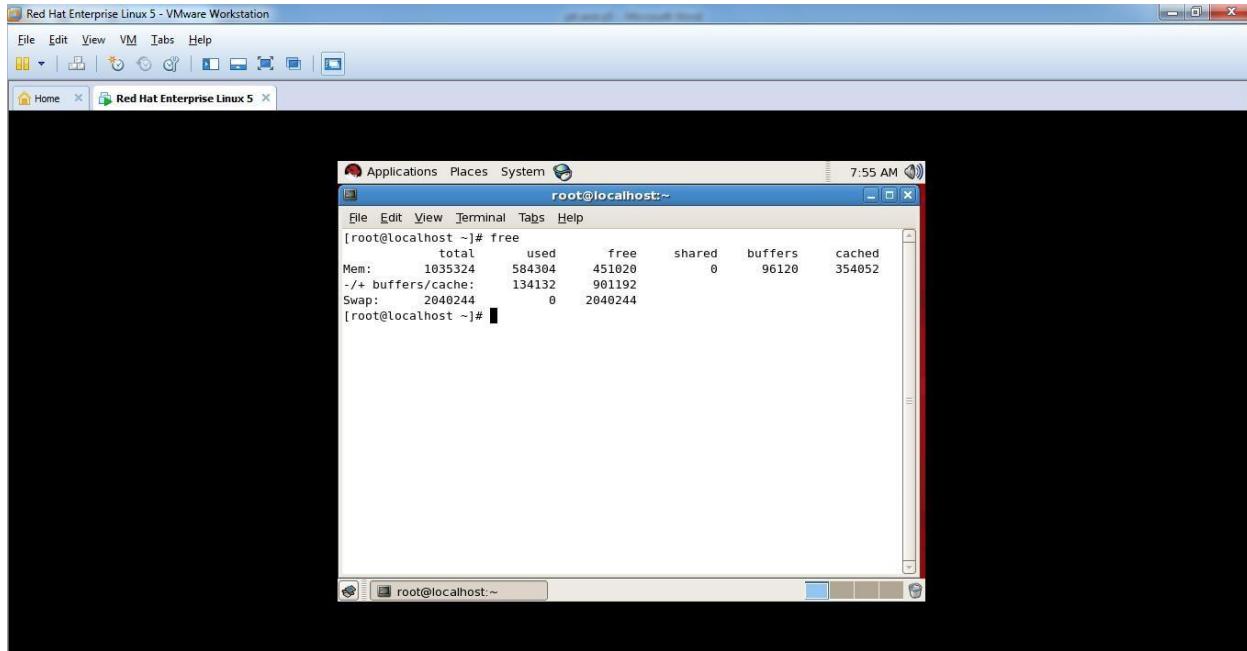
```
[root@localhost ~]# df
Filesystem      1K-blocks     Used Available Use% Mounted on
/dev/sda2       18035760  2237240  14867556  14% /
/dev/sda1        295561    15734   264567   6% /boot
tmpfs            517660         0   517660   0% /dev/shm
[root@localhost ~]#
```

root@localhost:~

15. du::Du estimates and displays the **disk** space used by **files**.



16.free::Displays the total amount of free and used **physical** and **swap** memory in the **system**, as well as the **buffers** used by the **kernel**.



Red Hat Enterprise Linux 5 - VMware Workstation

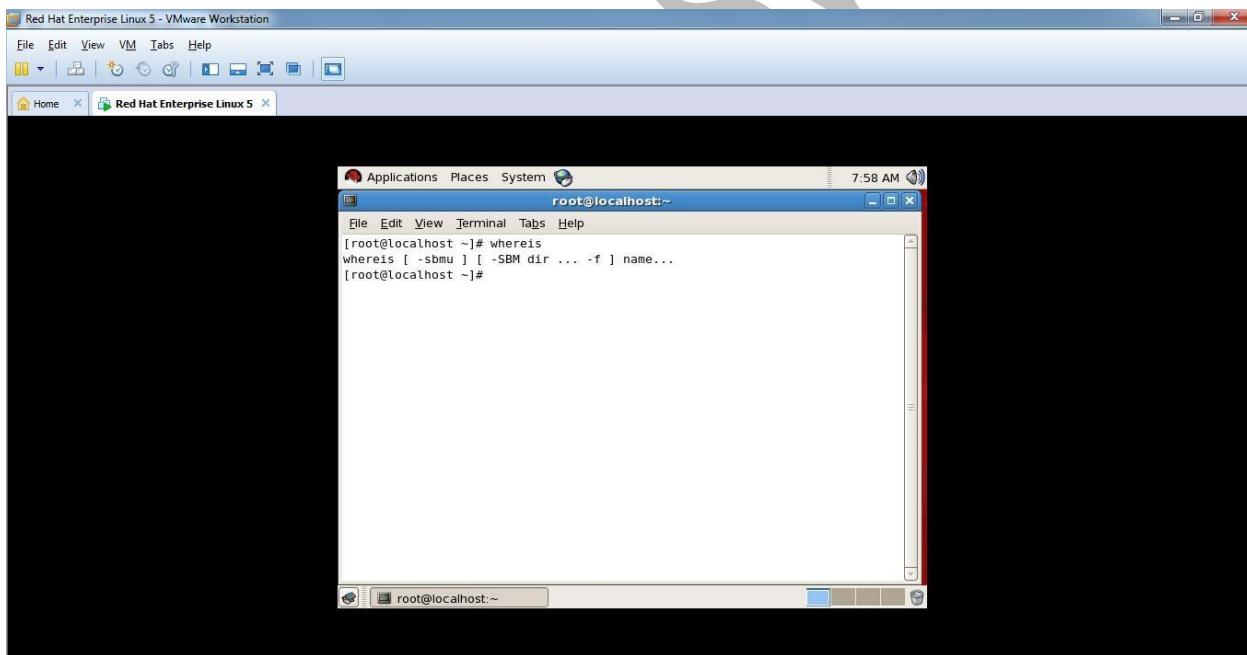
File Edit View VM Tabs Help

Home Red Hat Enterprise Linux 5

root@localhost:~ 7:55 AM

```
[root@localhost ~]# free
total        used        free      shared      buffers      cached
Mem:    1035324     584304    451020         0     96120    354052
/+ buffers/cache:    134132    901192
Swap:   2040244          0    2040244
```

17. Whereis::Locates the **binary**, **source**, and **manual page** files for a **command**.



Red Hat Enterprise Linux 5 - VMware Workstation

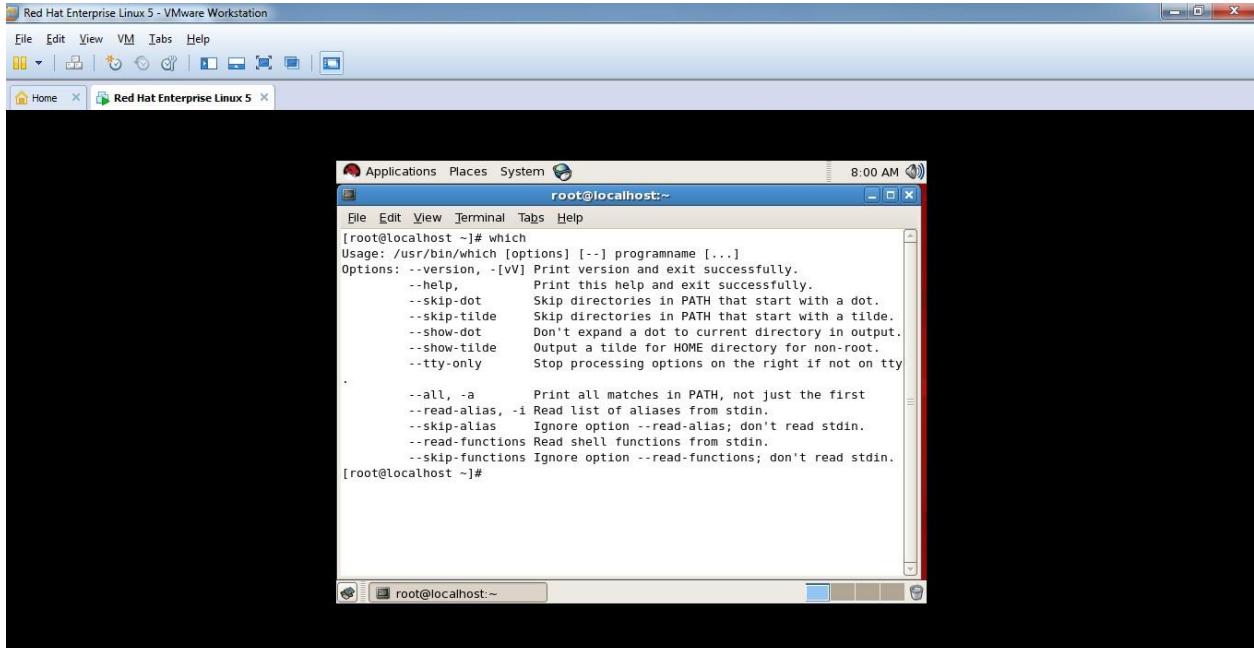
File Edit View VM Tabs Help

Home Red Hat Enterprise Linux 5

root@localhost:~ 7:58 AM

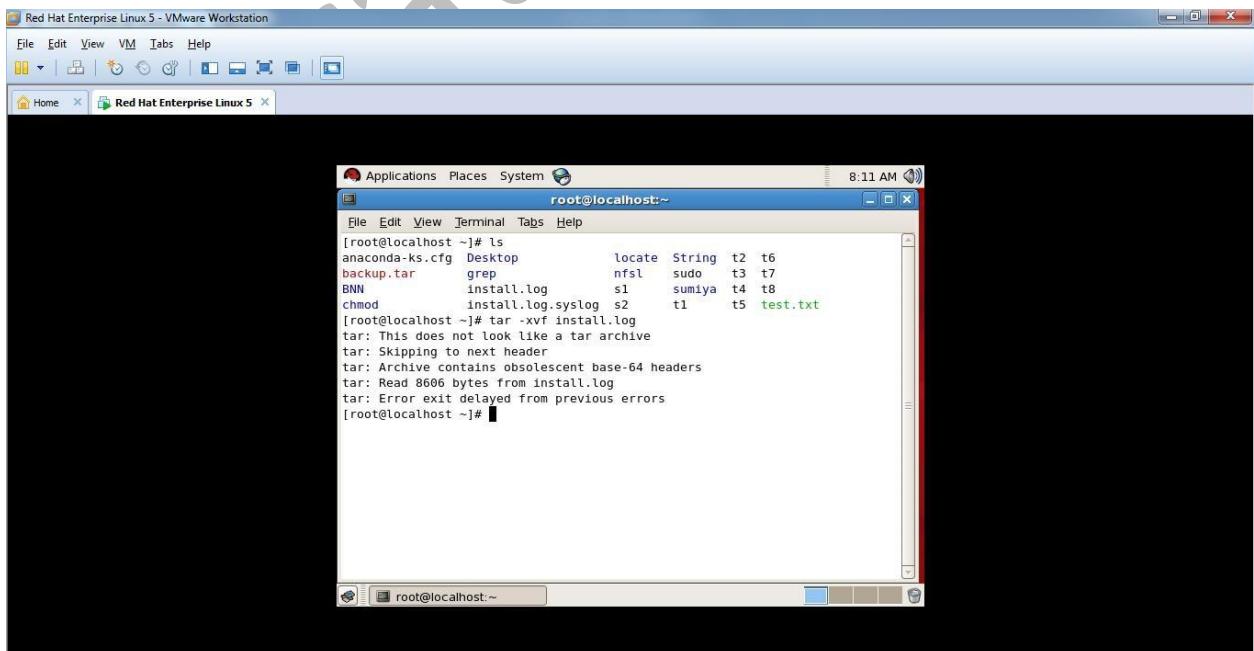
```
[root@localhost ~]# whereis
[root@localhost ~]# whereis [-sbmu] [-SBM dir ... -f ] name...
[root@localhost ~]#
```

18. which::which returns the path names of the files(or links)which would be executed in the current environment, had the file name(or file names)been given as Command (or commands) in a strictly POSIX-conform ant shell.



```
[root@localhost ~]# which
Usage: /usr/bin/which [options] [-] programname [...]
Options: --version, -[vV] Print version and exit successfully.
         --help,      Print this help and exit successfully.
         --skip-dot   Skip directories in PATH that start with a dot.
         --skip-tilde Skip directories in PATH that start with a tilde.
         --show-dot   Don't expand a dot to current directory in output.
         --show-tilde Output a tilde for HOME directory for non-root.
         --tty-only   Stop processing options on the right if not on tty
         --all, -a    Print all matches in PATH, not just the first
         --read-alias, -i Read list of aliases from stdin.
         --skip-alias  Ignore option --read-alias; don't read stdin.
         --read-functions Read shell functions from stdin.
         --skip-functions Ignore option --read-functions; don't read stdin.
[root@localhost ~]#
```

19. tar::The tar program issued to create, maintain, modify, and extract files that are archived in the tar format.

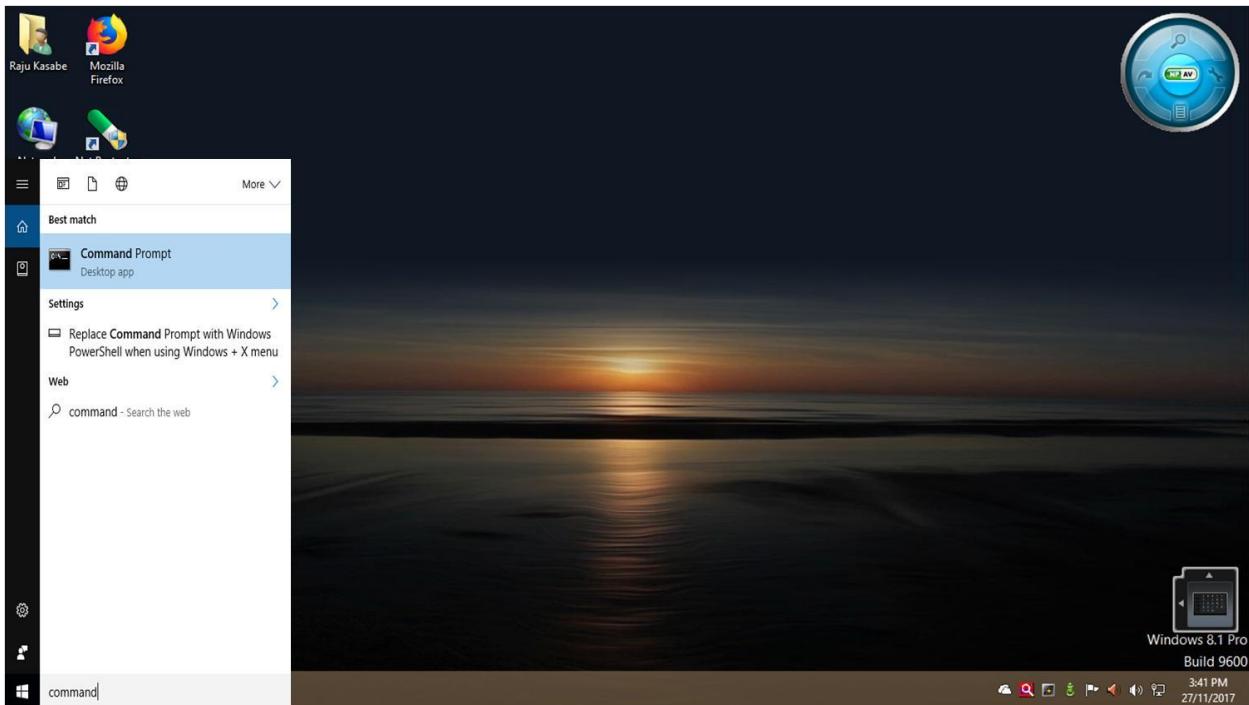


```
[root@localhost ~]# ls
anaconda-ks.cfg  Desktop      locate  String  t2  t6
backup.tar       grep        nfsl  sudo  t3  t7
BNN             install.log  s1  sumiya  t4  t8
chmod           install.log.syslog  s2  t1  t5  test.txt
[root@localhost ~]# tar -xvf install.log
tar: This does not look like a tar archive
tar: Skipping to next header
tar: Archive contains obsolescent base-64 headers
tar: Read 8606 bytes from install.log
tar: Error exit delayed from previous errors
[root@localhost ~]#
```

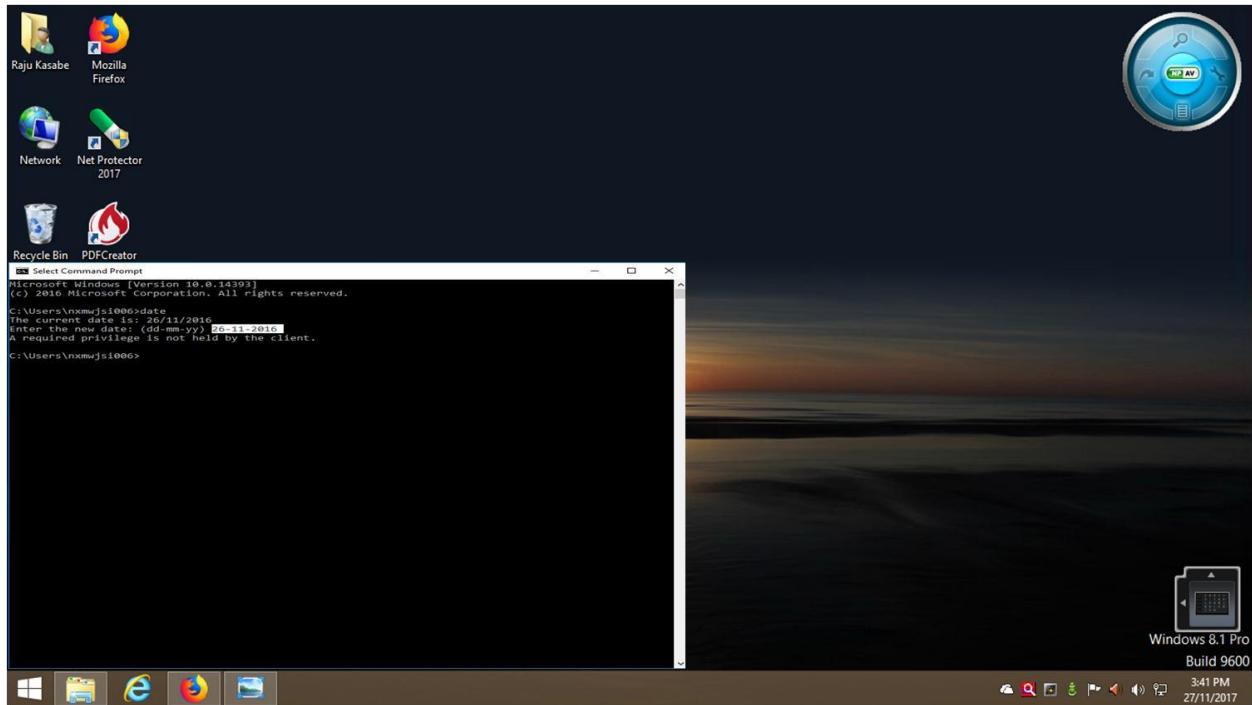
PRACTICAL NO.6

Aim: **WINDOWS (DOS) COMMAND1.**

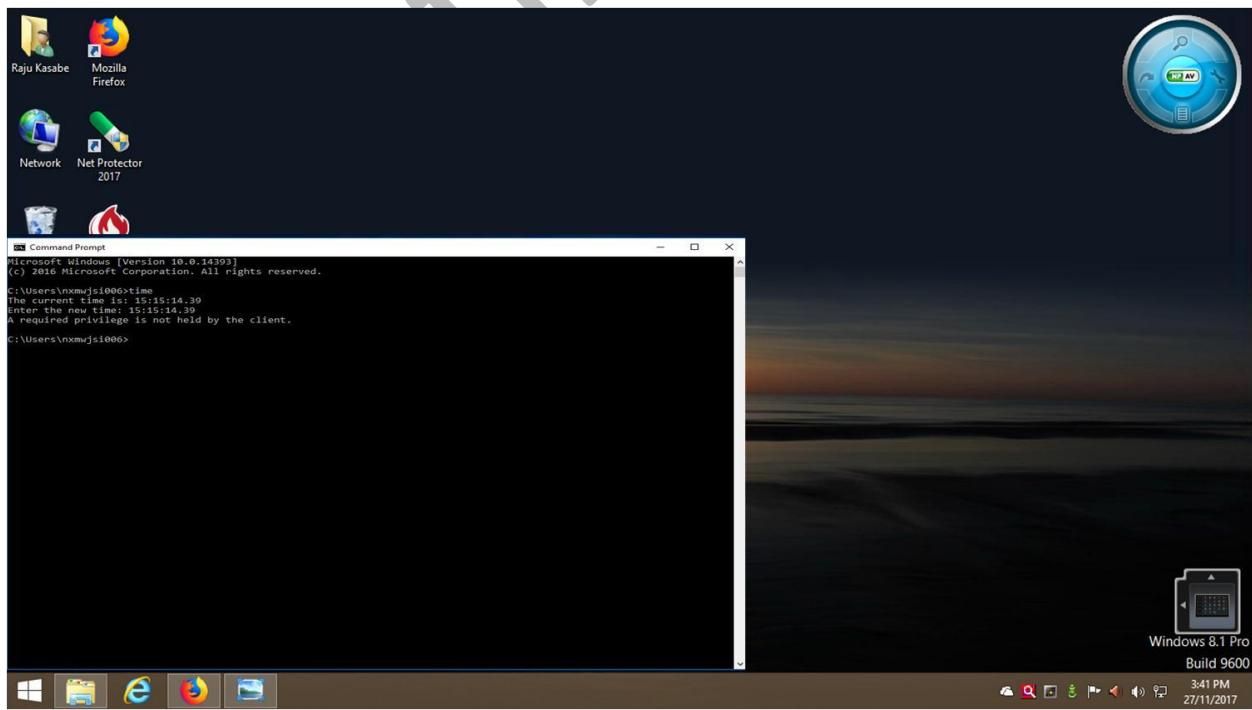
1. Start the command prompt program.



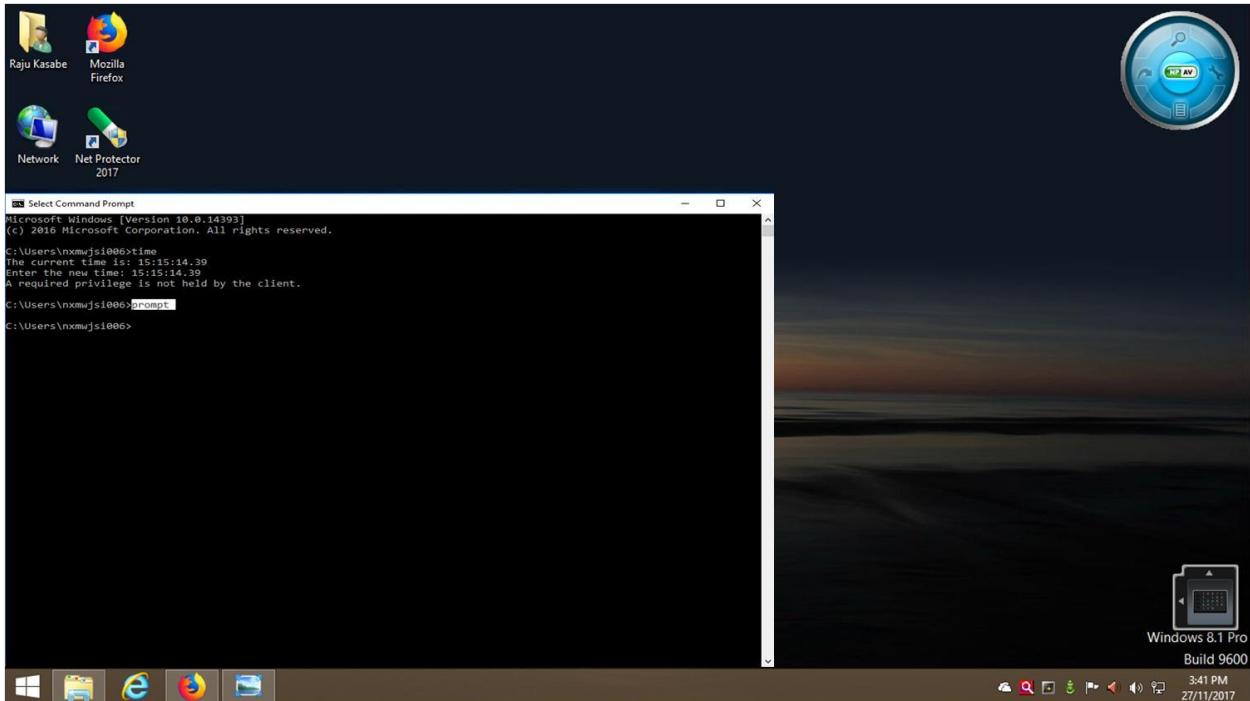
2. date::Displays the system date and prompts the user to enter a date. Date will be Shown when you use the DIR command to display information about files new date.



3.time::Display the system time and waits for the user to enter an time. TIME is a command in DOS that is used to display and set the current system time of the operating system.



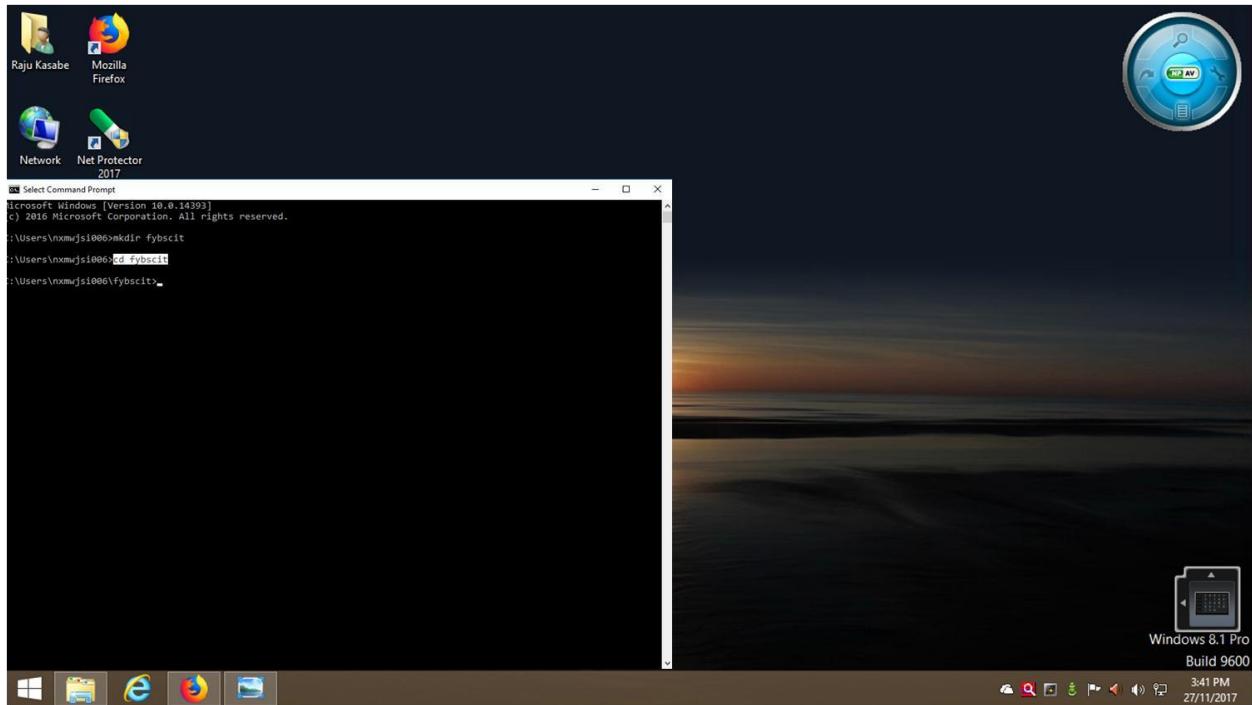
4. prompt::The prompt command allows you to change the MSDOS prompt to display More or less information. The prompt command is an internal command that is available in the Microsoft operating systems.



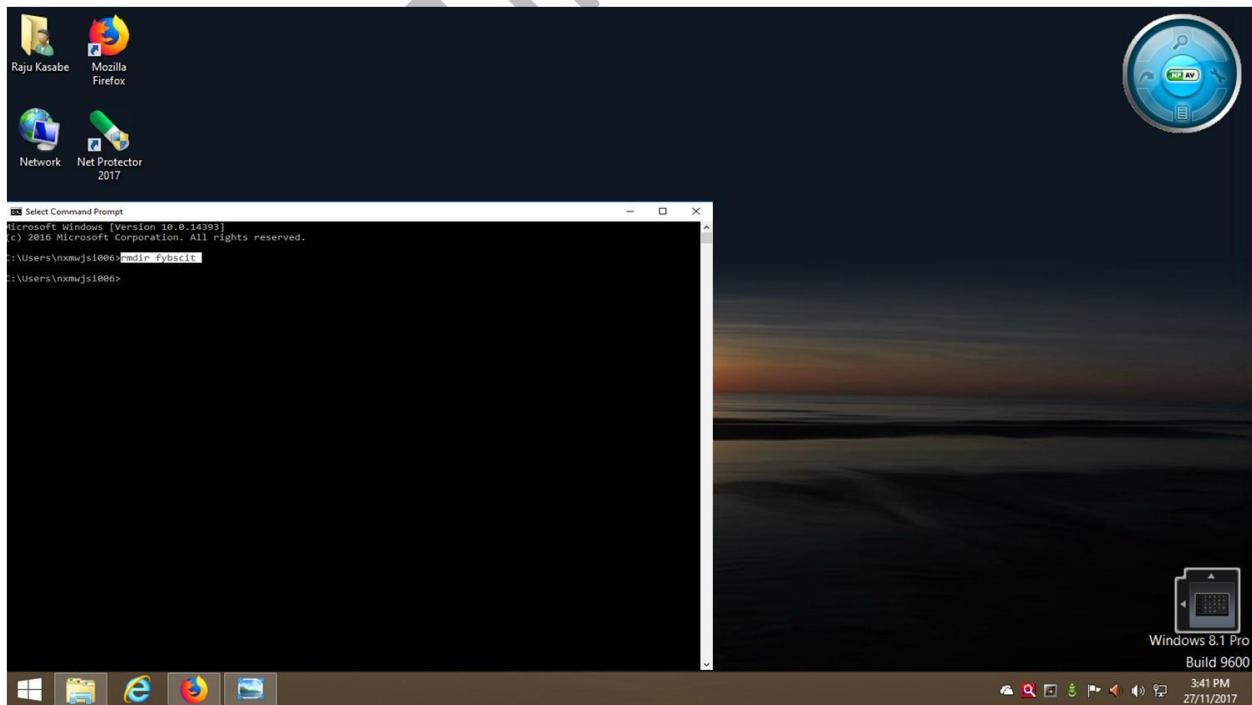
5. mdormkdir:: Makes an directory. The parent of the directory specified will be create di fit does not already exist.

```
c:\ Select Command Prompt  
Microsoft Windows [Version 10.0.14393]  
© 2016 Microsoft Corporation. All rights reserved.  
C:\Users\nxmwjsi006>mkdir fybscit  
C:\Users\nxmwjsi006>
```

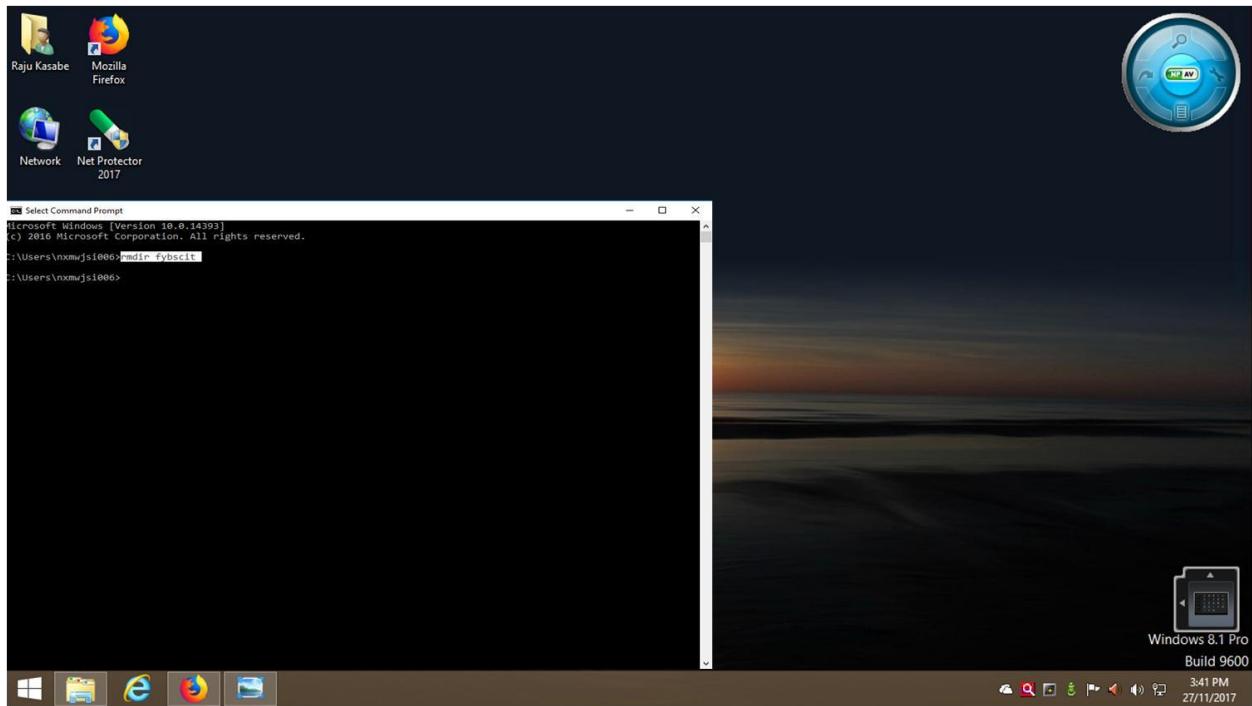
6.cd and chdir::The CHDIR(or the alternative name CD)command either displays or changes the current working directory.



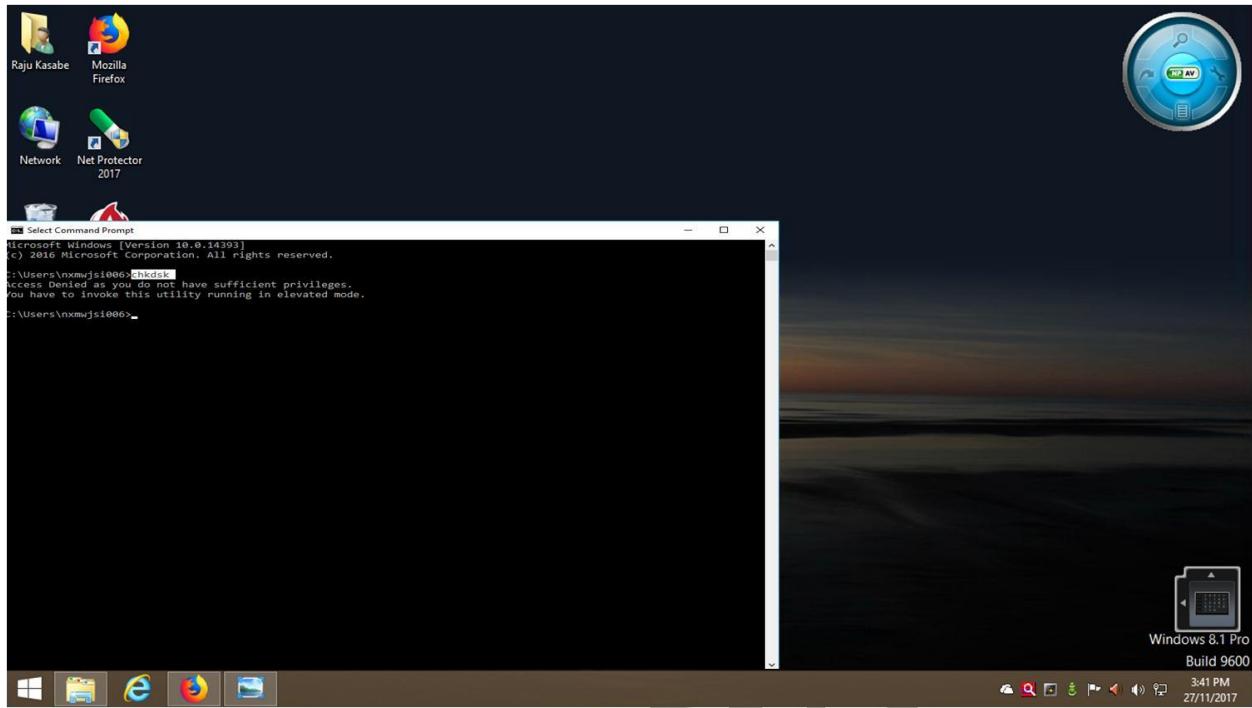
7.rdrormdir::Remove a directory(delete a directory);by default the directories must Be empty offiles for the command to succeed. The del tree command in some versions of MS-DOS and all versions of Windows9x removes non-empty directories.



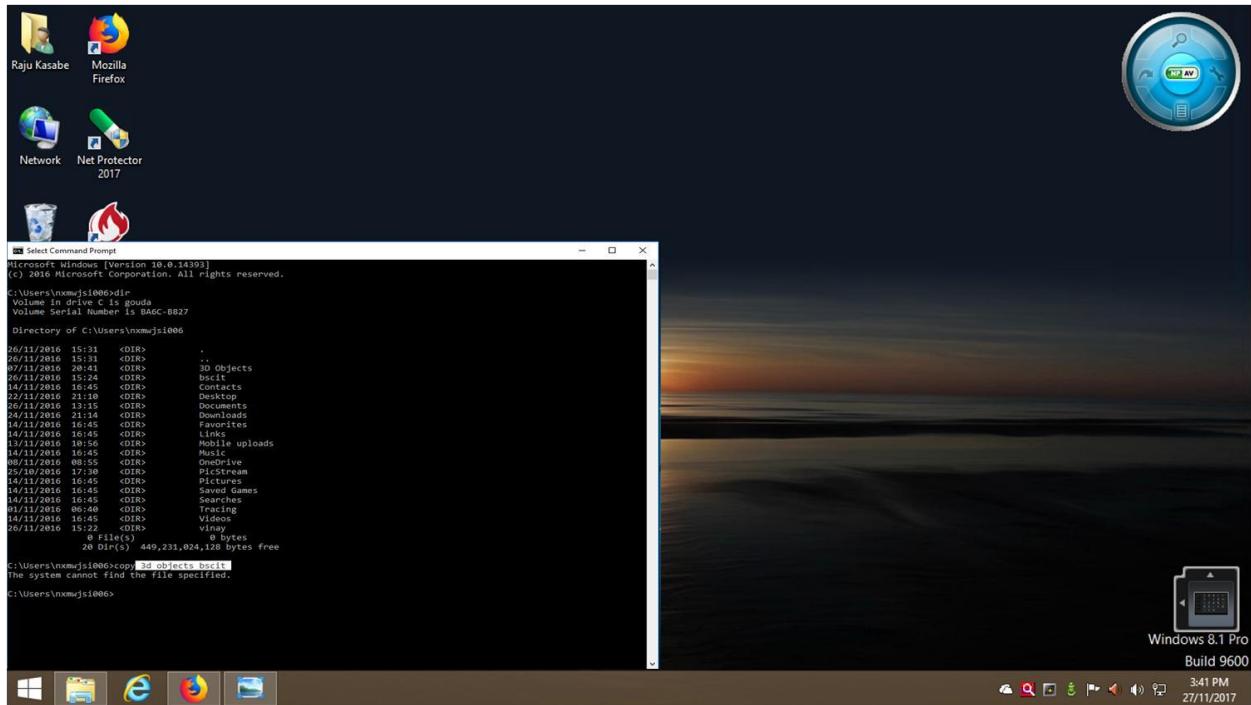
8.path::Displays or sets a search path for executable files.



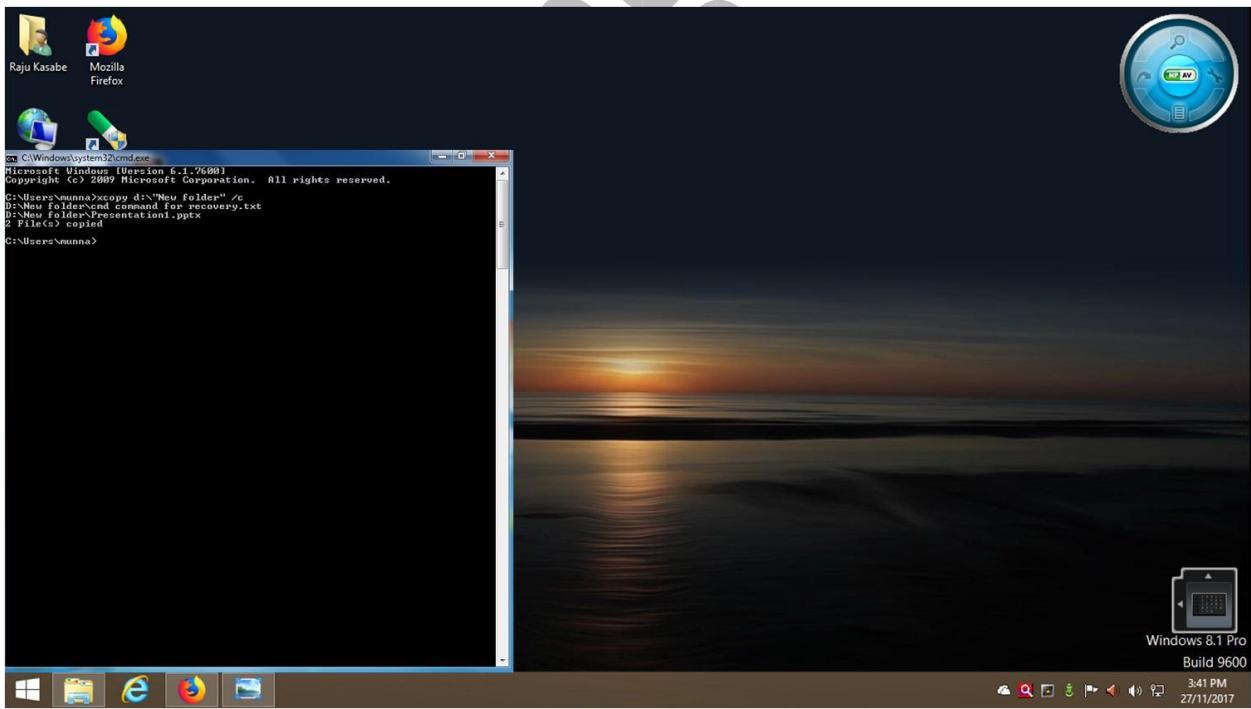
9.Chkdsk::CHKDSK verifies a storage volume (for example, a hard disk, disk partition or floppy disk) for file system integrity. The command has the ability to fix errors on a volume and recover information from defective disk sectors of a volume.



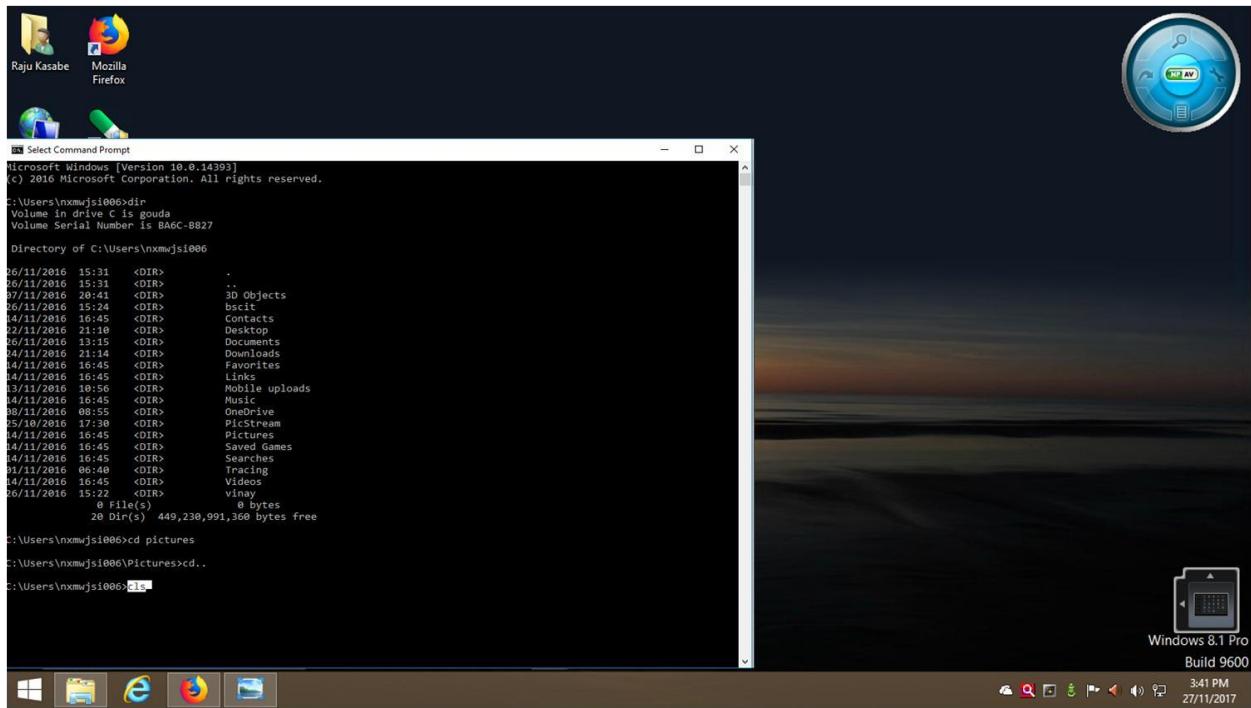
10. Copy::Copies files from one location to another. The destination defaults to the current directory. If multiple source files are indicated, the destination must directory, or an error will result.

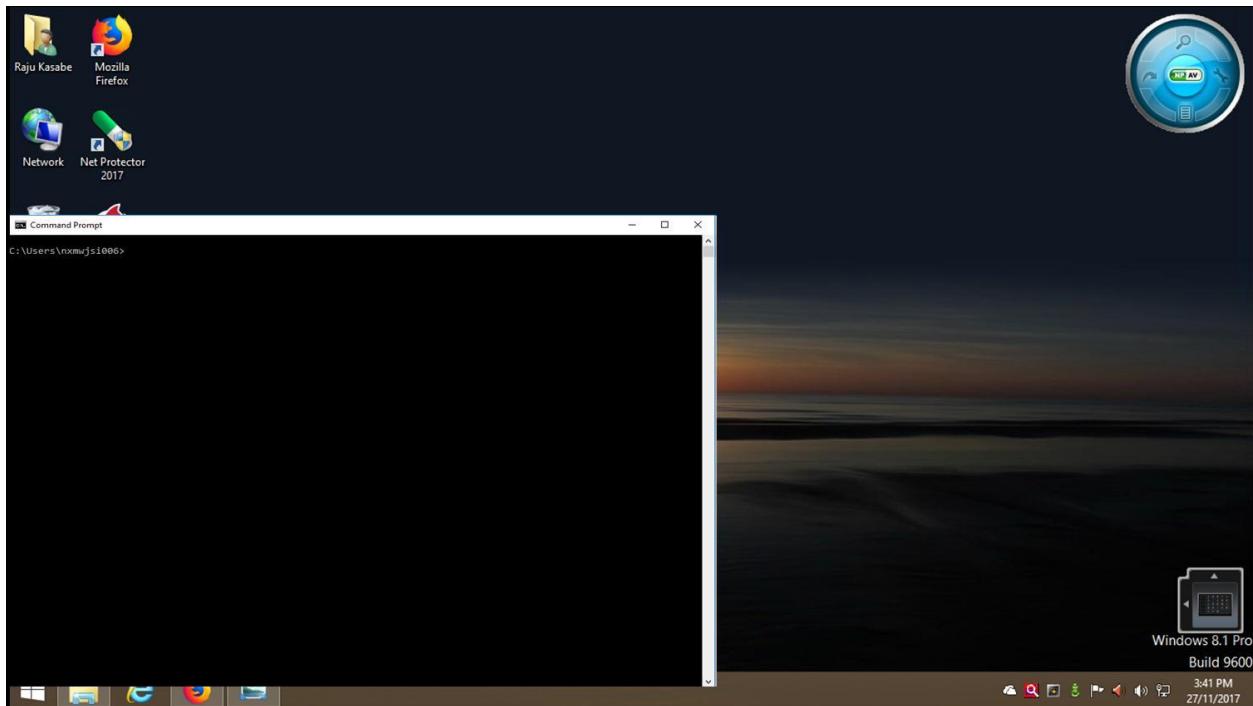


11. Xcopy::Copy entire directory trees. Xcopy is a version of the copy command that can move files and directories from one location to another.

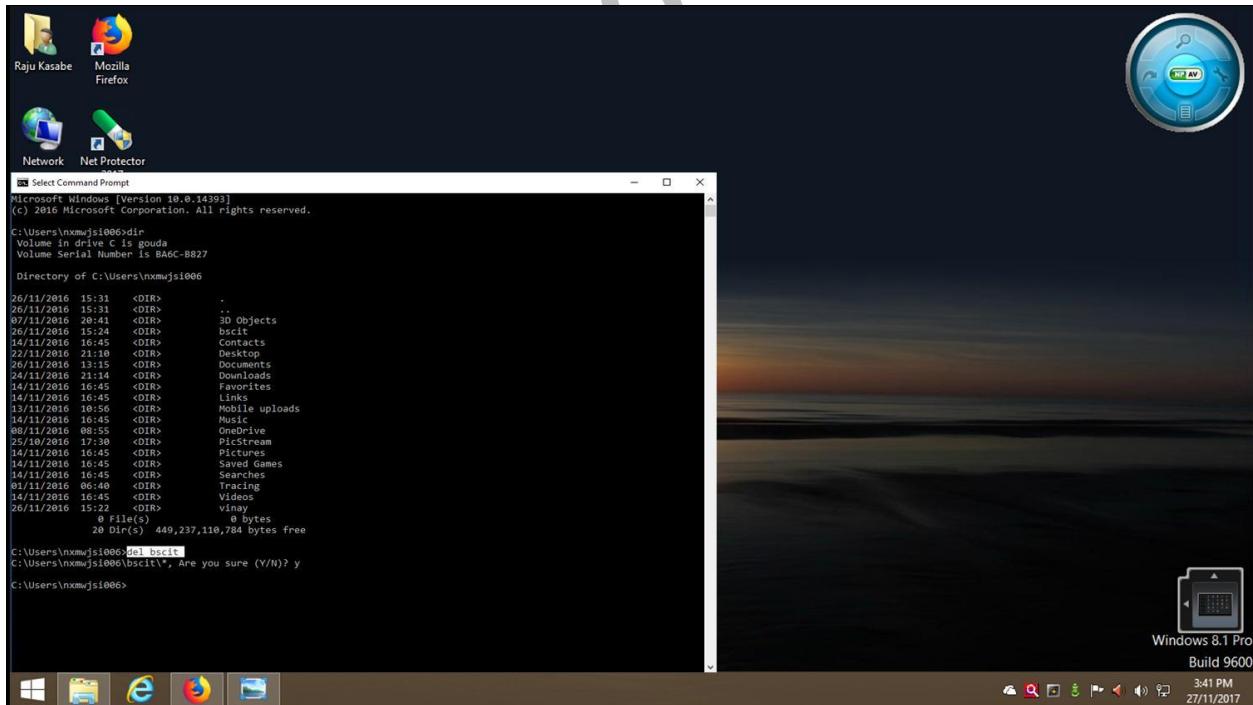


12. cls::The CLS or CLRSCR command clears the terminal screen.

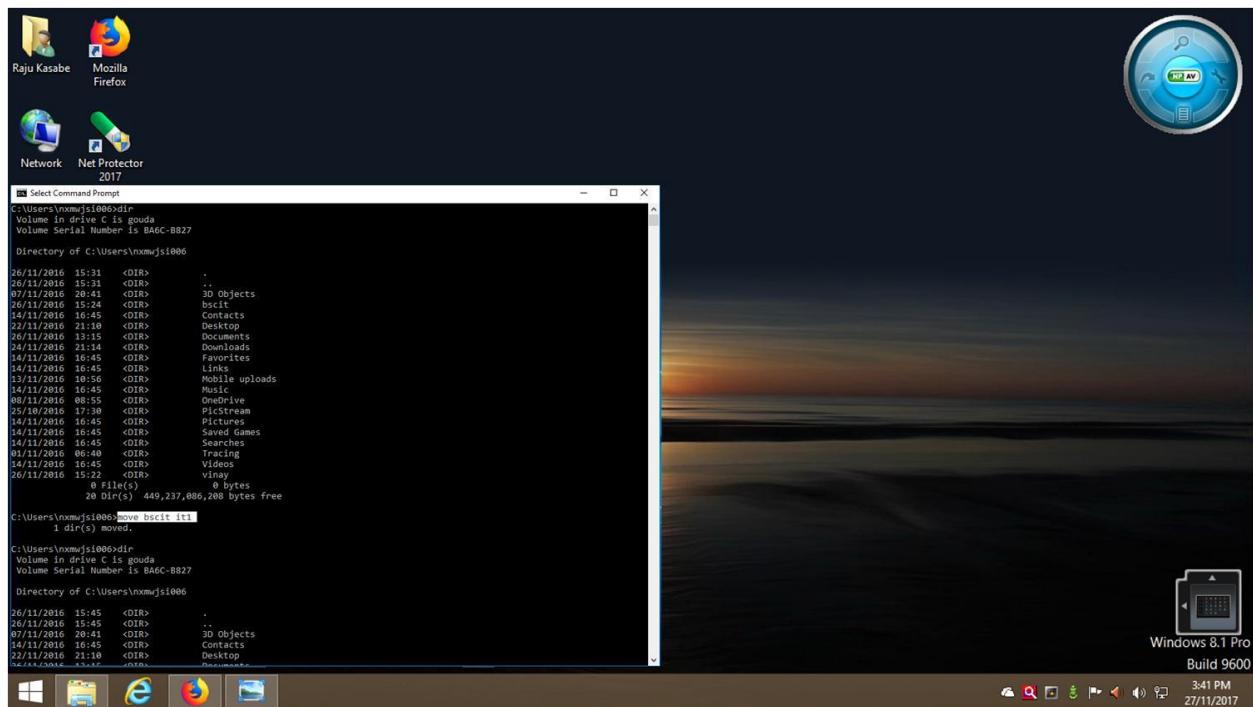




13. del::DEL(or the alternative form ERASE) issued to delete one or more files.



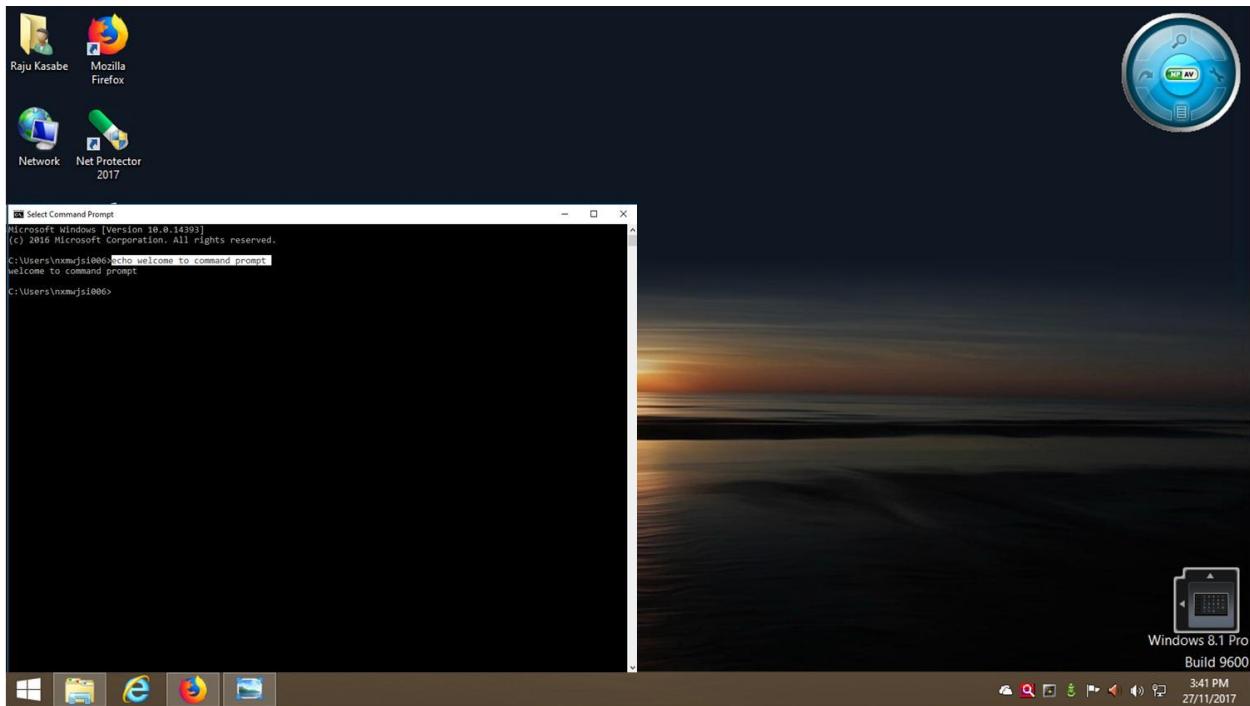
14. Move::Moves files or renames directories. Allows you to move files or directories from one folder to another, or from one drive to another.



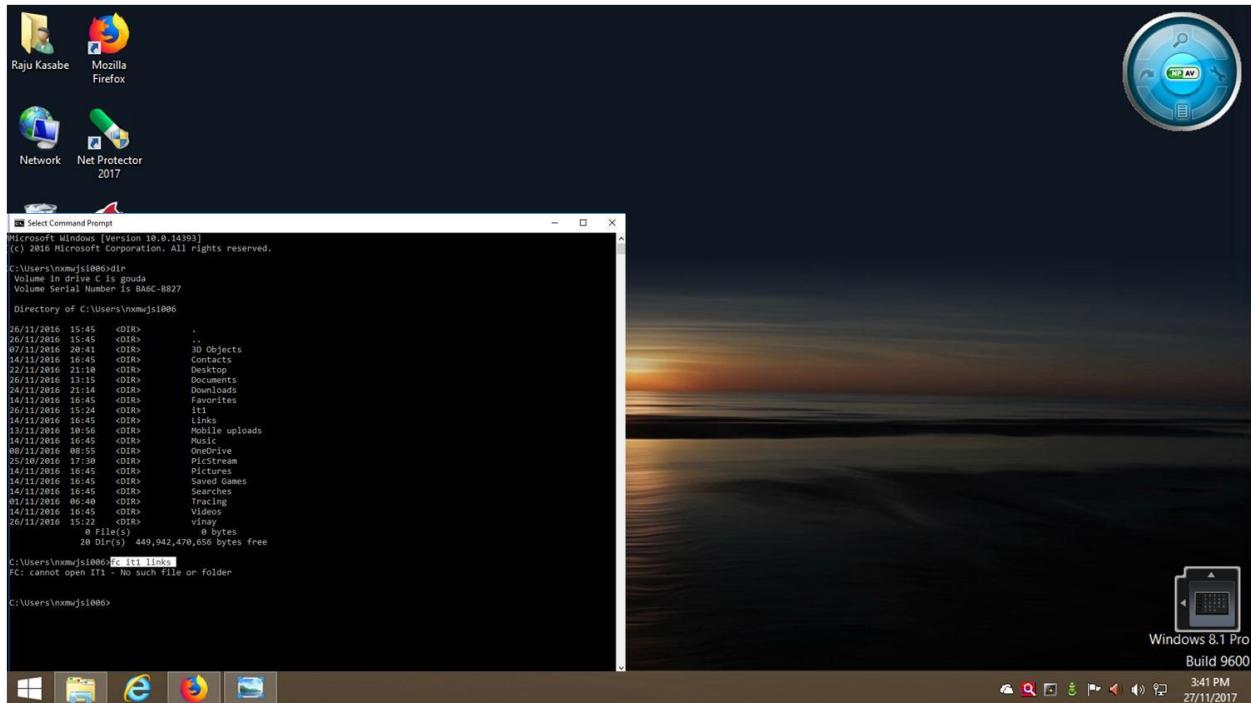
PRACTICALNO.7

Aim:Windows(DOS)Command2

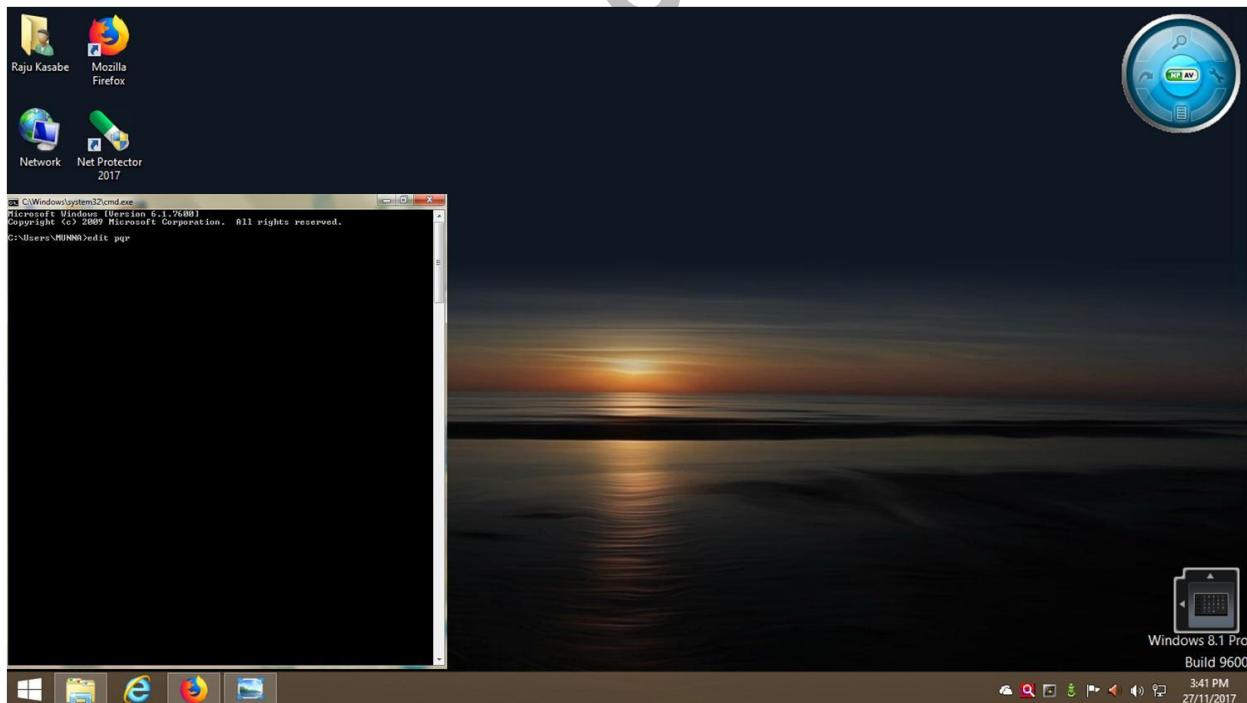
1.echo::Echo is used to repeat the text type in back to the screen and can be used to Echo to a peripheral on the computer, such as a COM port.

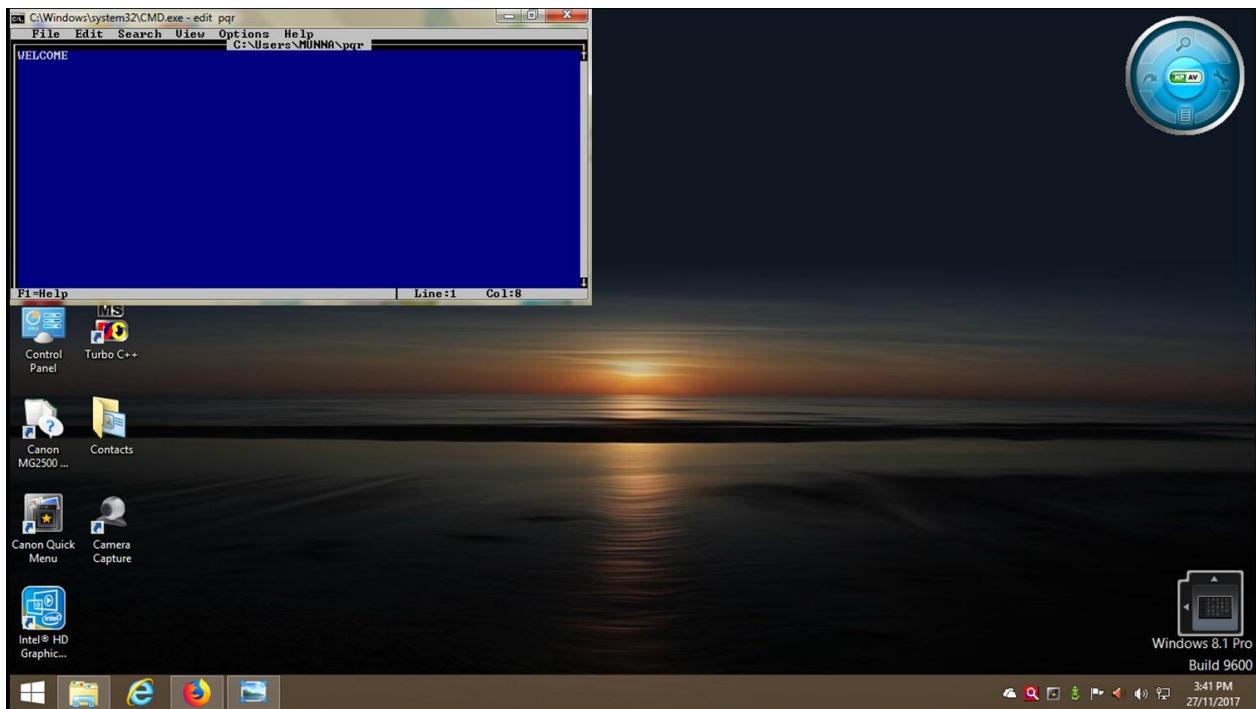


2.fc::FC,or file compare, issued to compare two files against each other. Once completed, returns lines that differ between the two files.

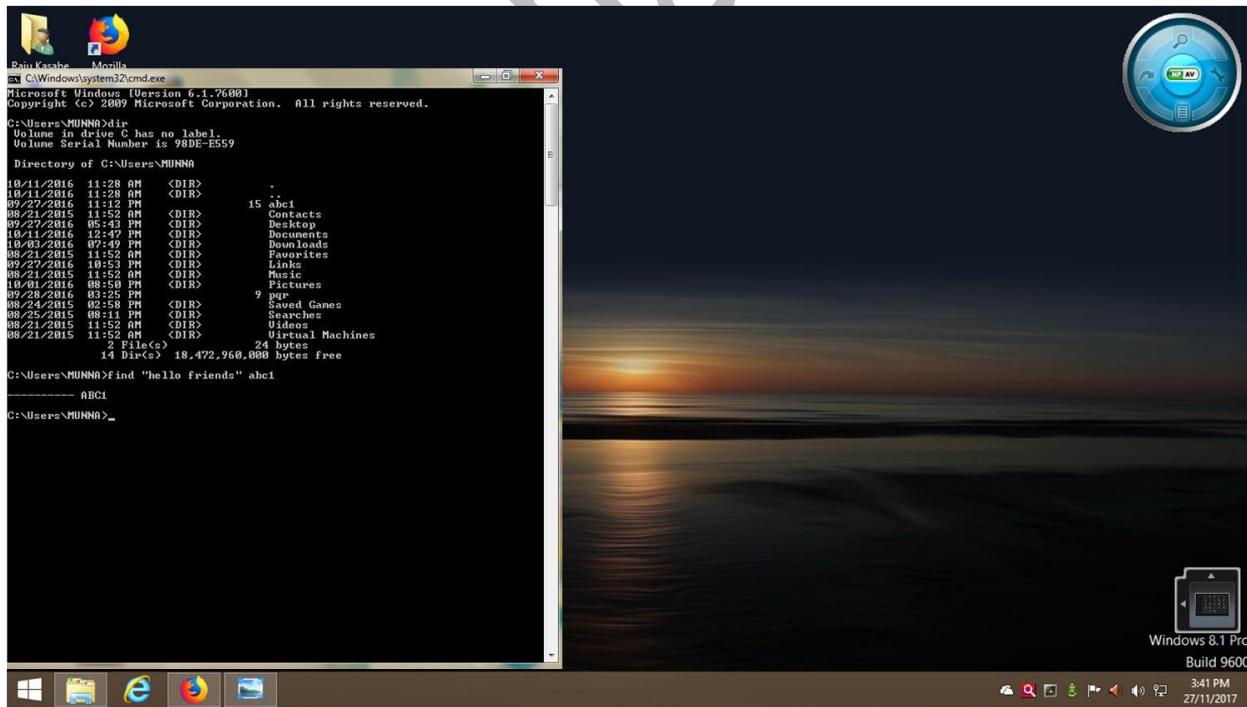


3.edit:The MS-DOS editor is a command line text editor that allows you to view, create, or modify any file on your computer.

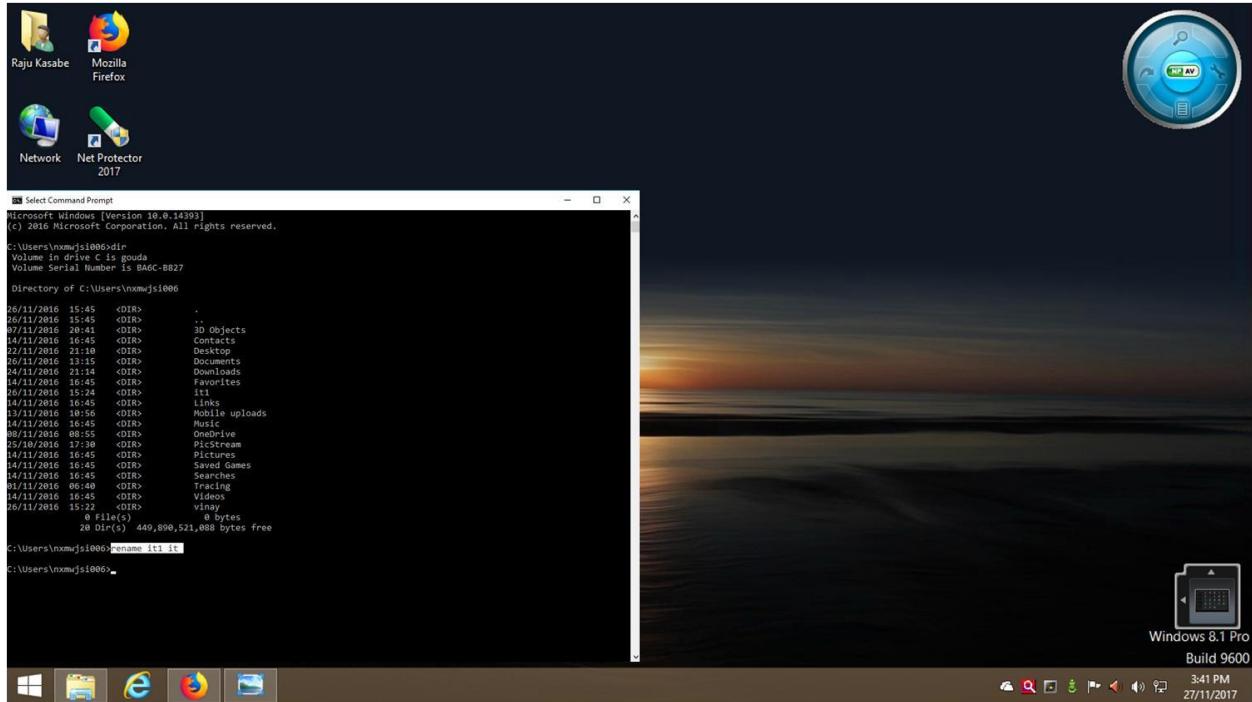




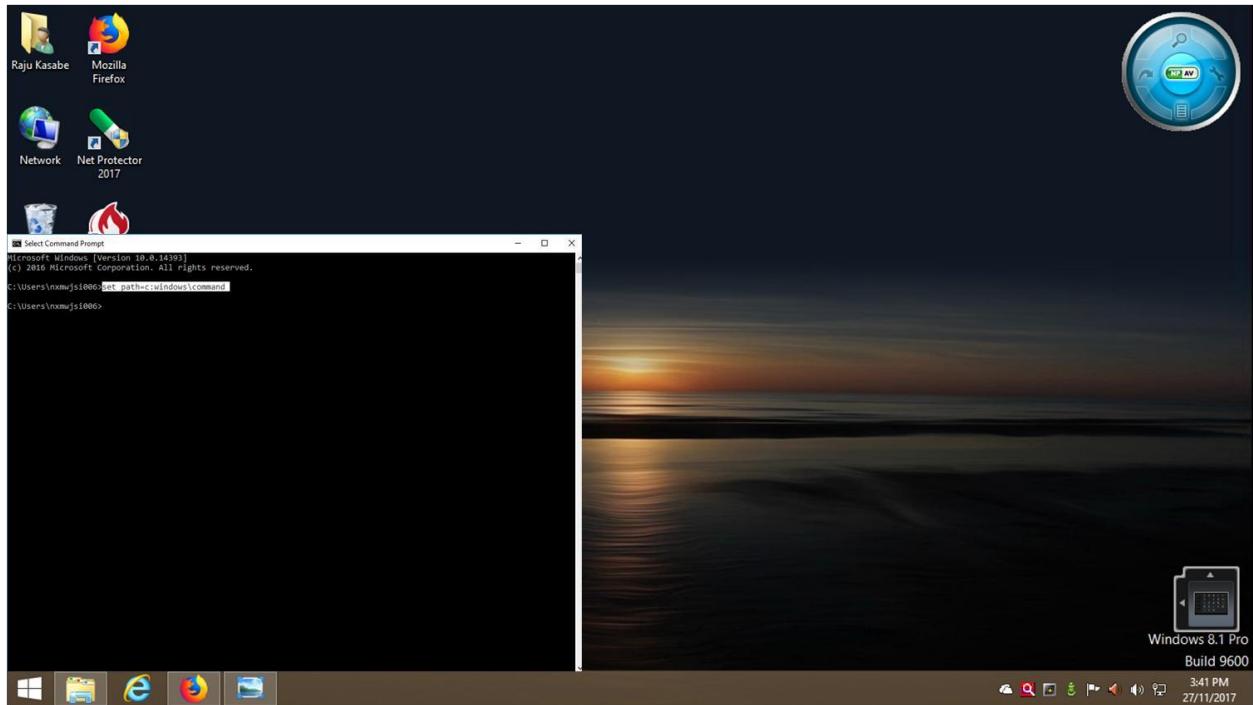
4.Find::The FIND command is a filter to find lines in the input data stream that Contain or don't contain a specified string and send the set o the output data stream.It may also be used as a pipe.



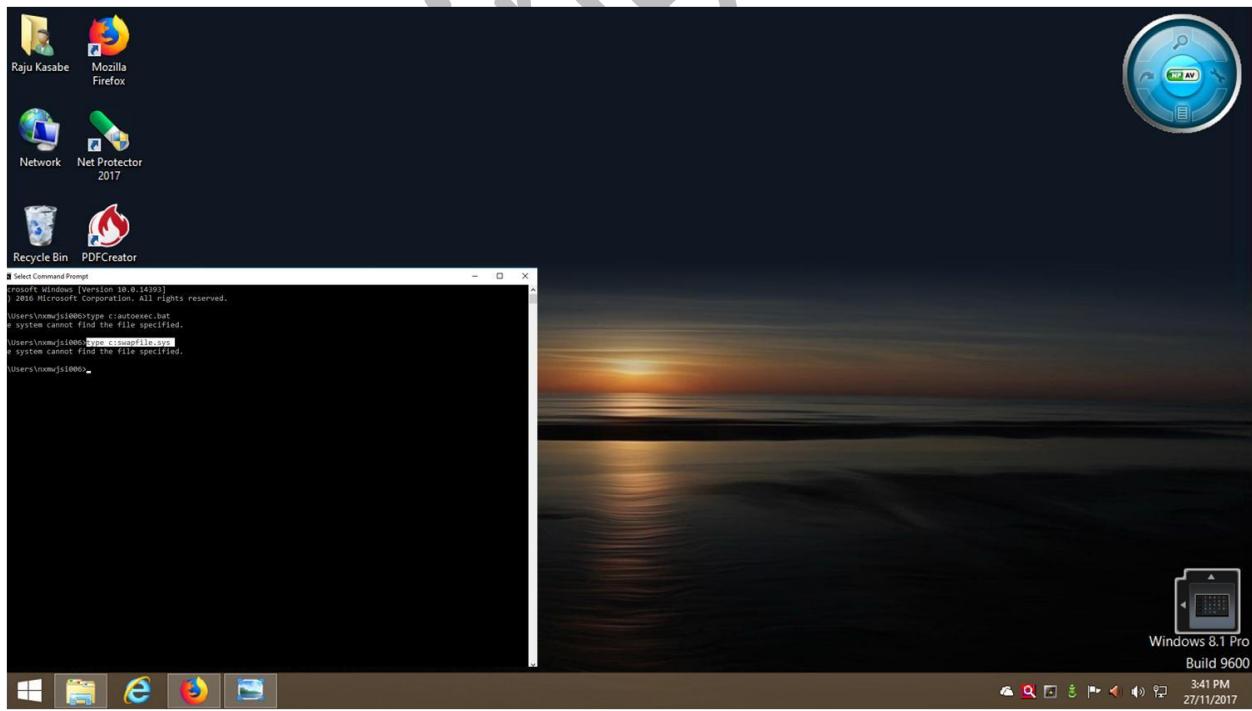
5.rename::Used to rename file sand directories from the original name to a new name. In earlier releases of MS-DOS instead of using rename you need to use the move command to rename your MS-DOS directories or files.



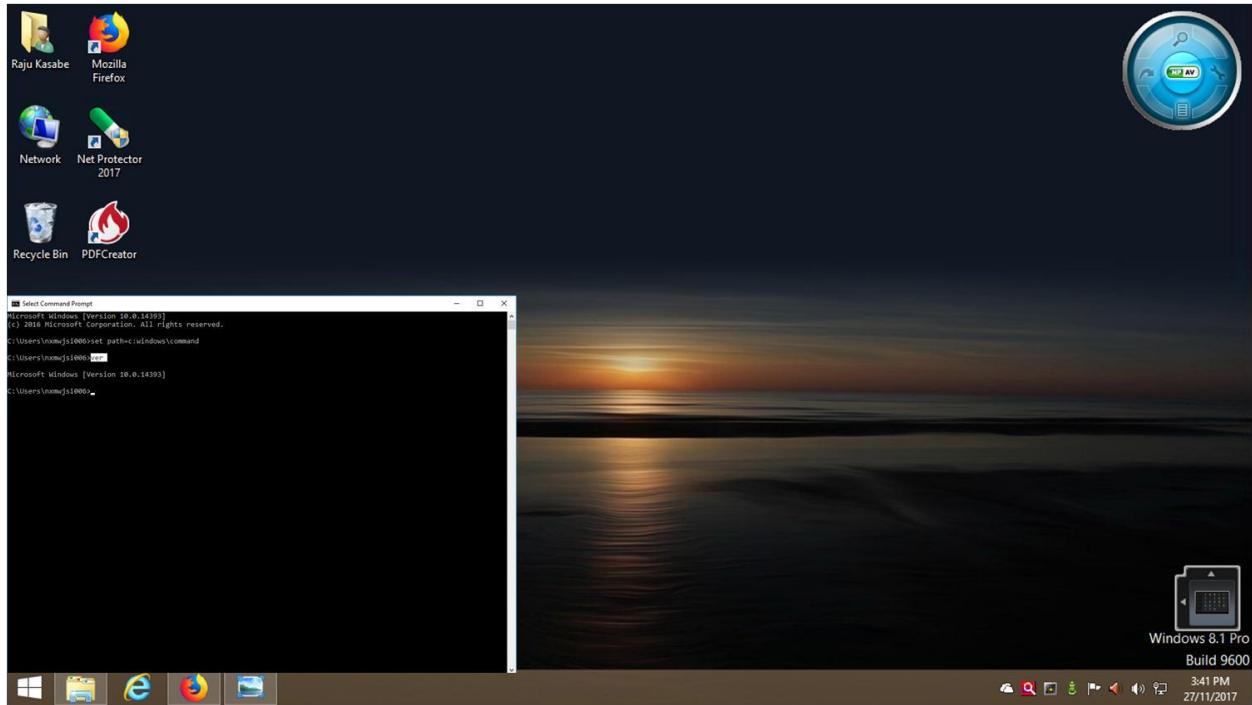
6.set: :Allows you to change one variable or string to another.



7.type::Allows the user to see the contents of a file.To edit the files, the user would need to use either edit or copy con.



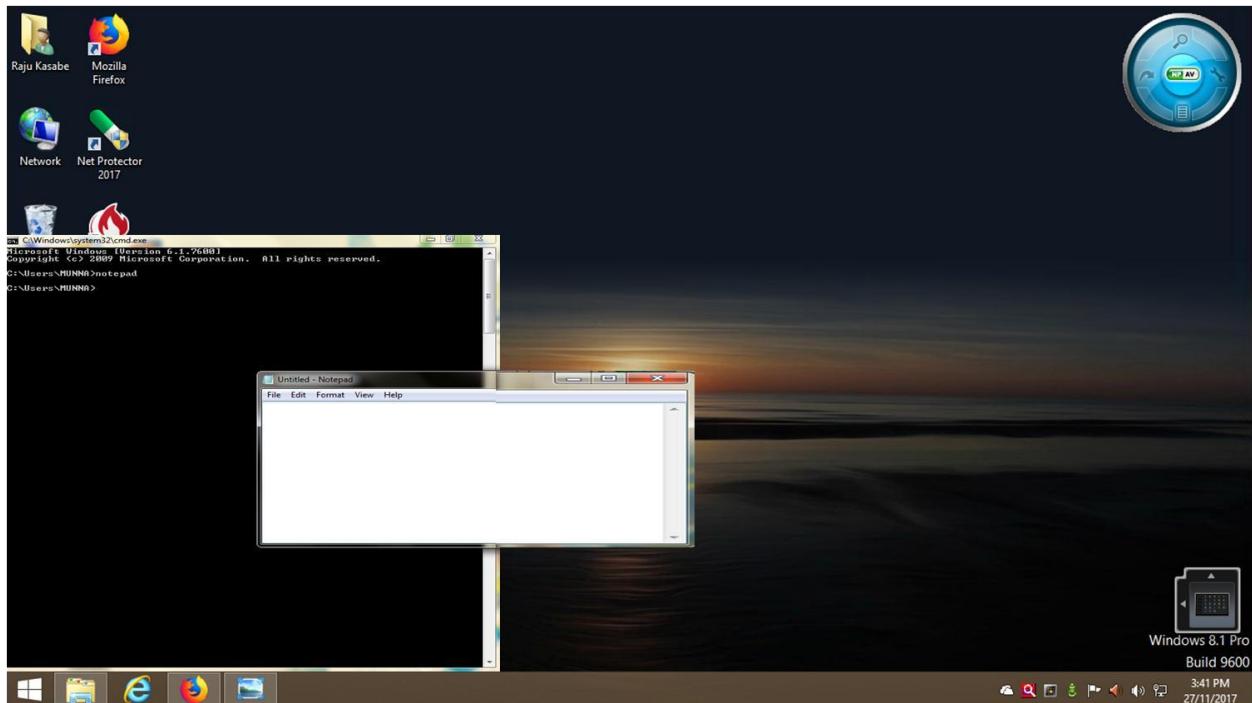
8.Ver::Displays the version of MS-DOS or if running Windows 95 or above the version of Windows.



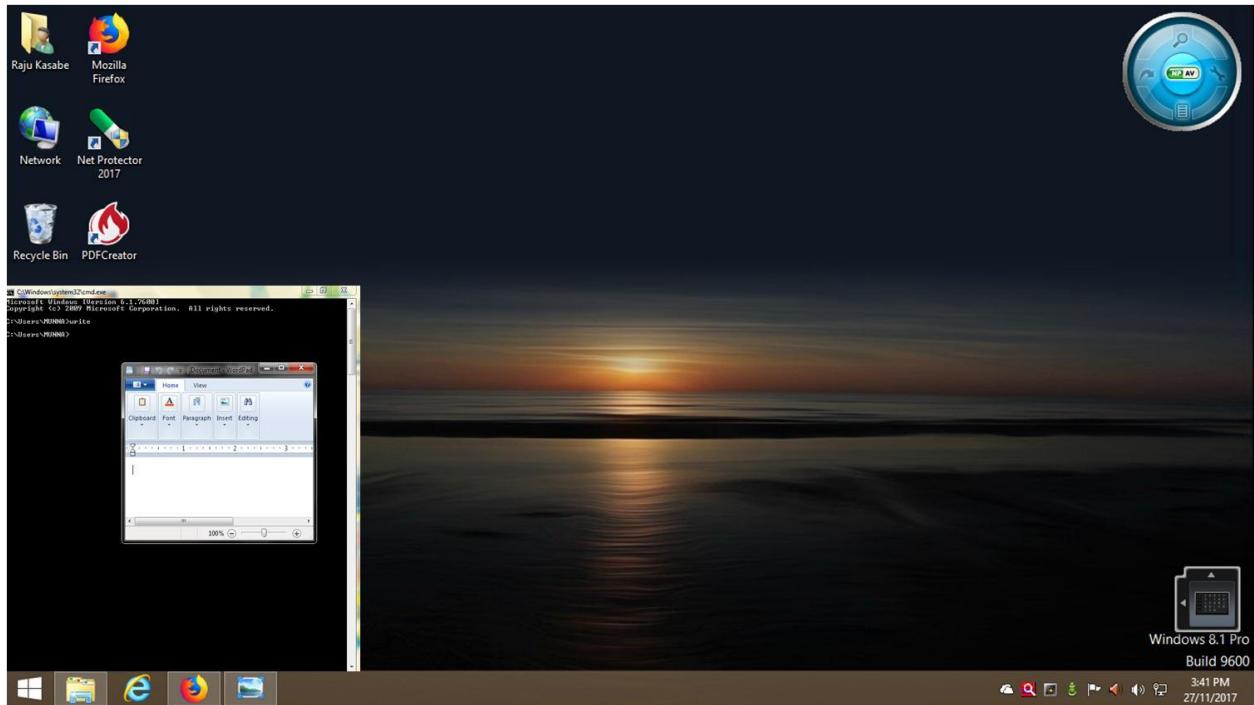
PRACTICAL NO.8

Aim: Working with windows desktop and utilities.

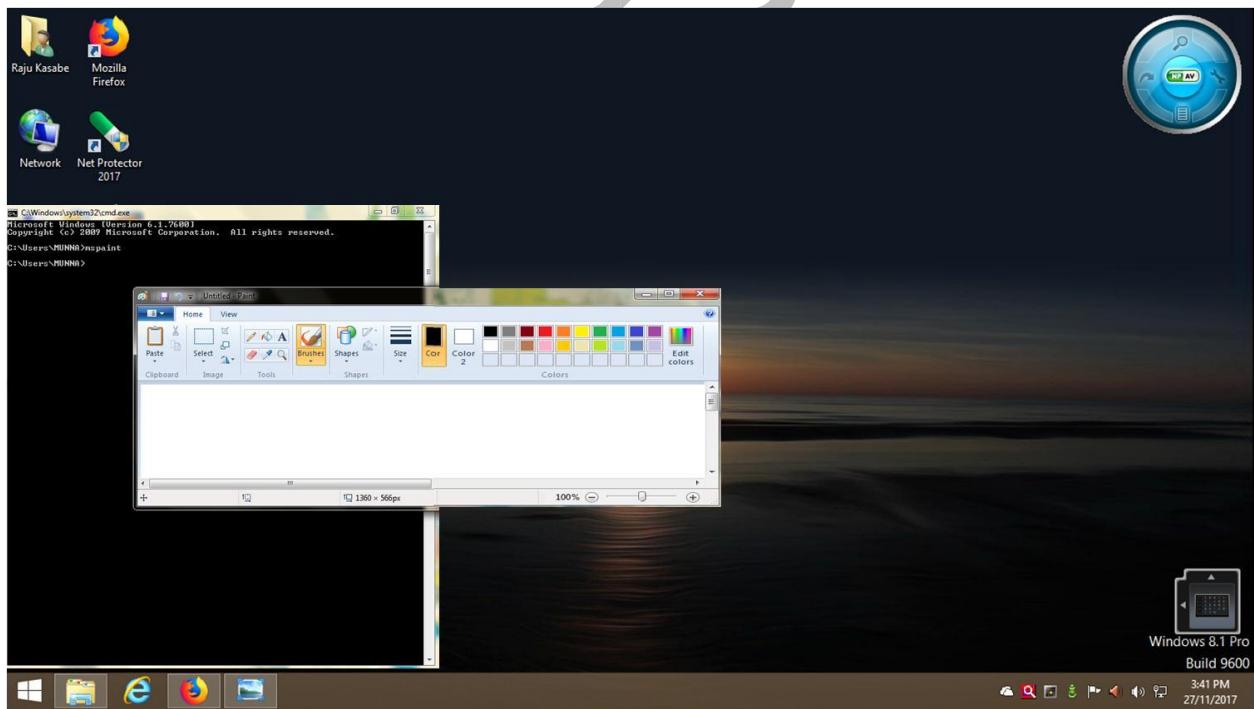
1.notepad::To open the windows note pad.



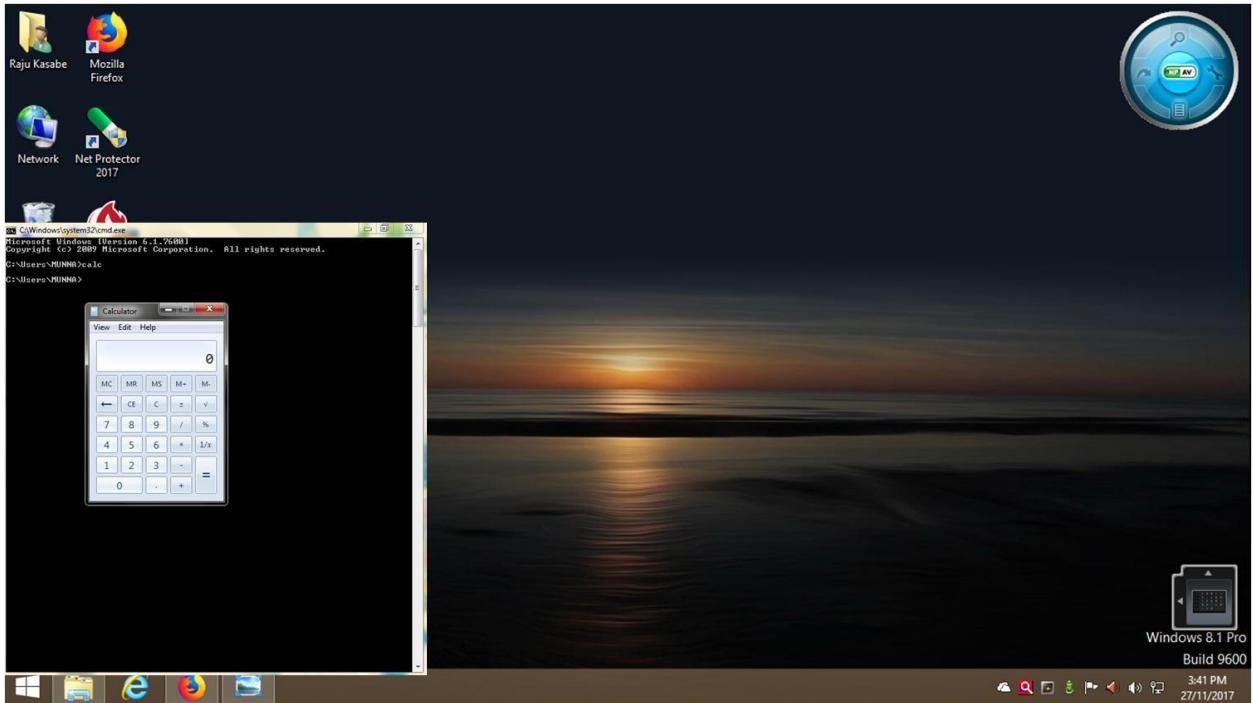
2.write::To open the windows word pad.



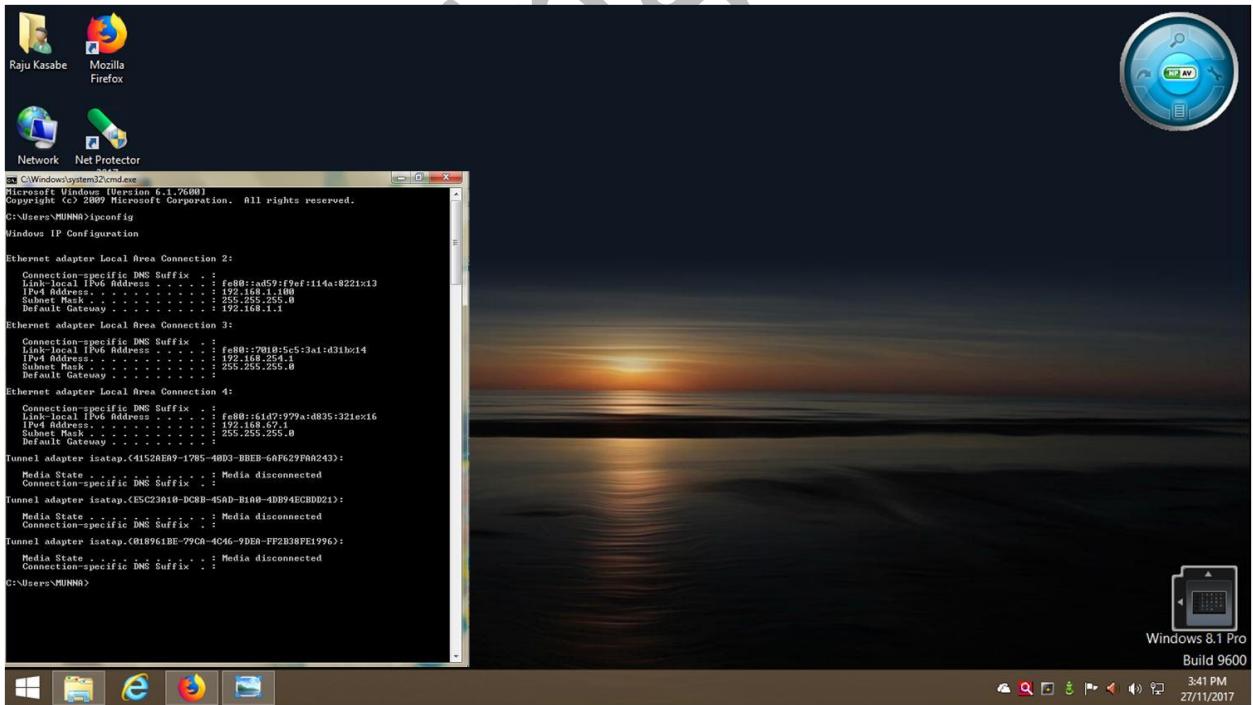
3.mspaint::To open the my paint.



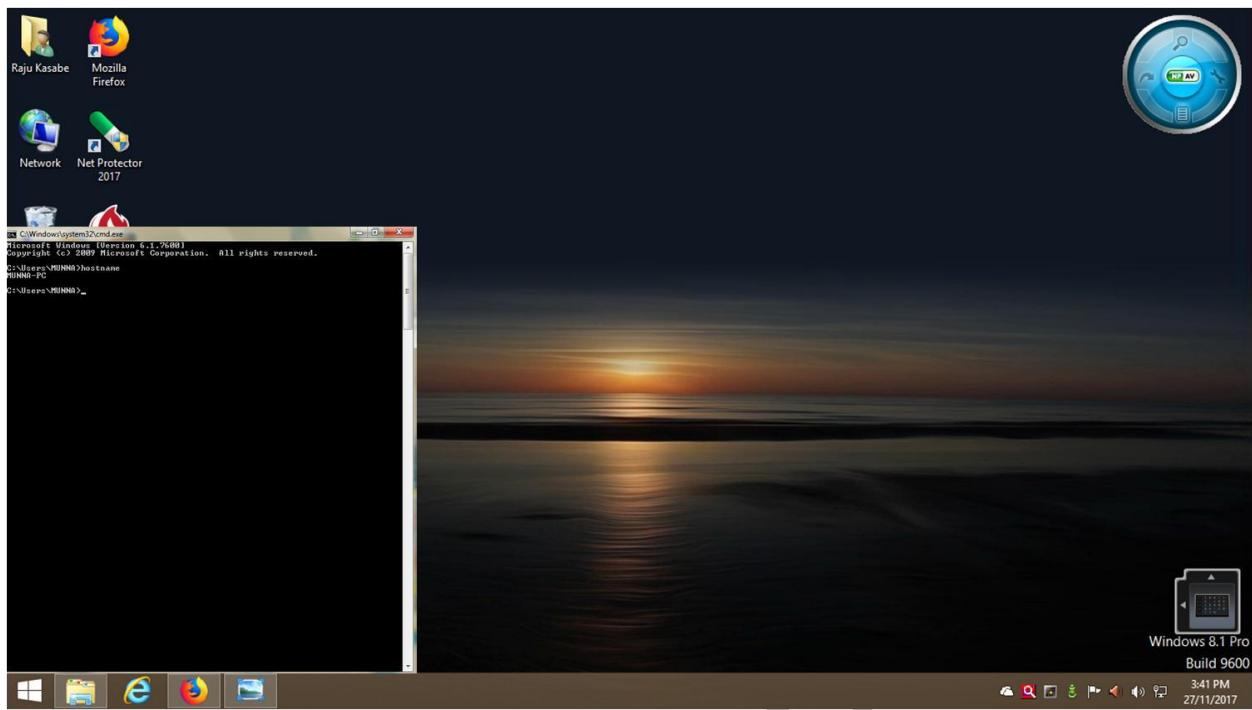
4.calc::To open the calculator.



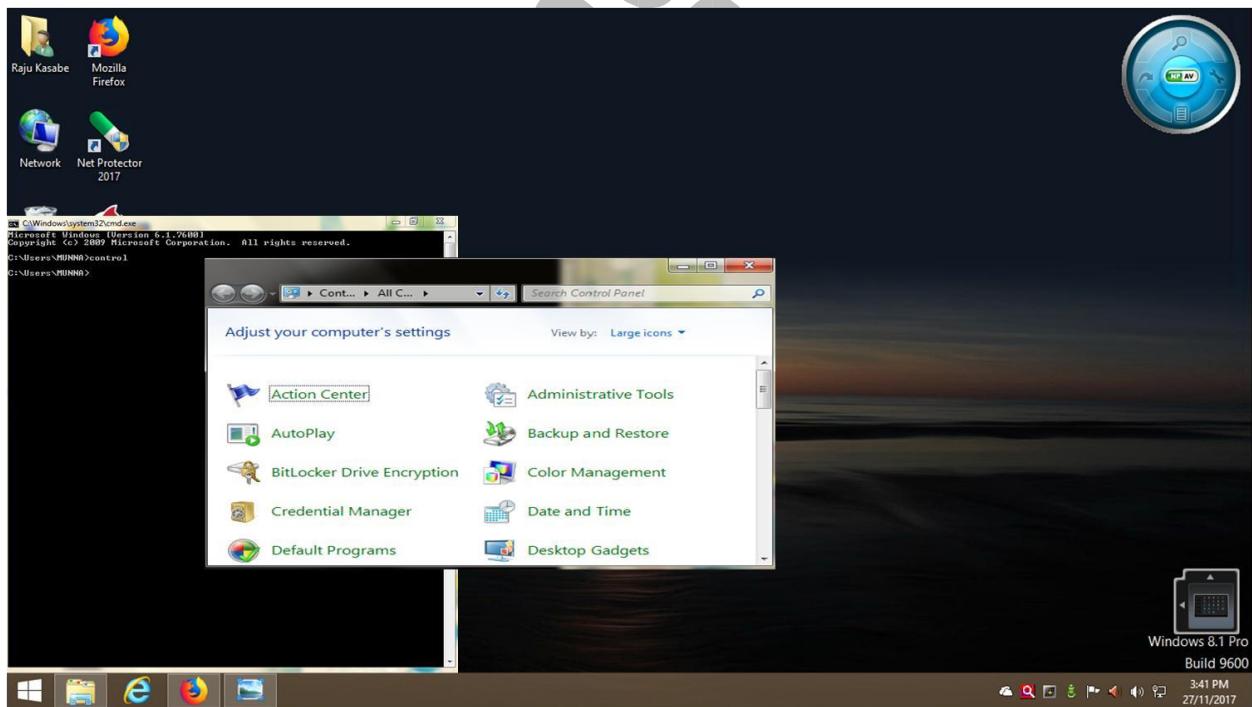
5.ipconfig::To open the IPaddress of PC.



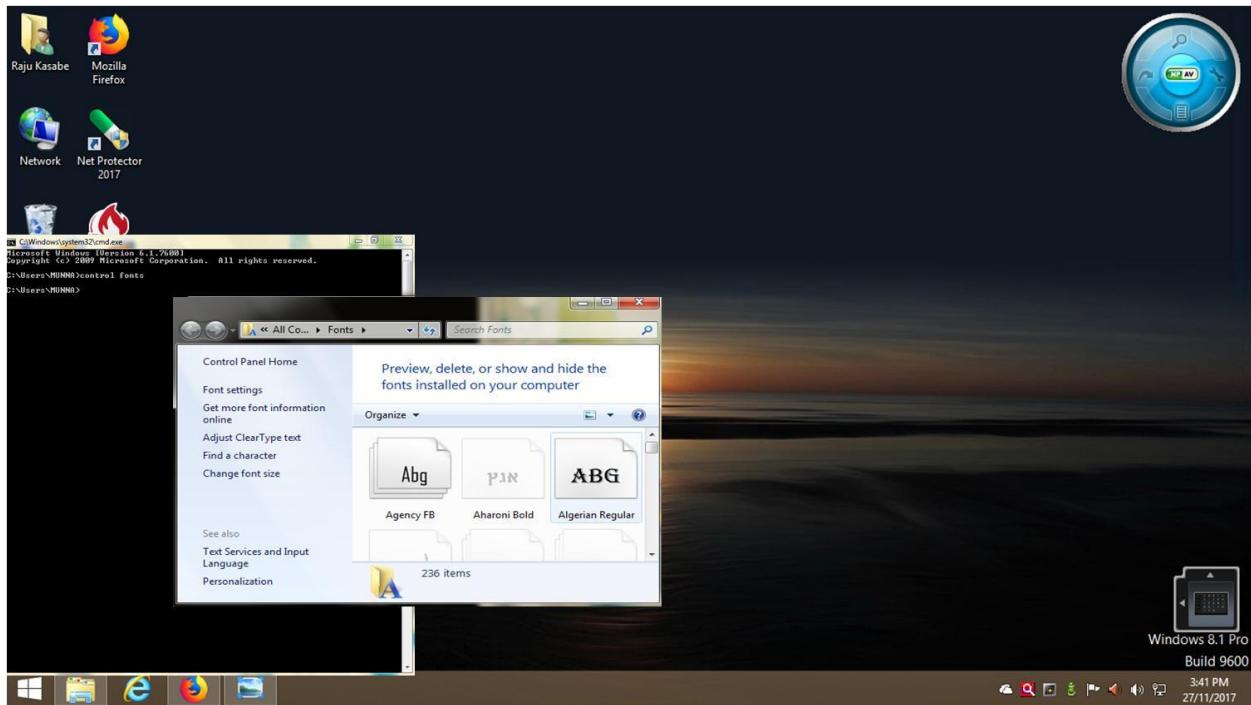
6.hostname::To know the host name of PC.



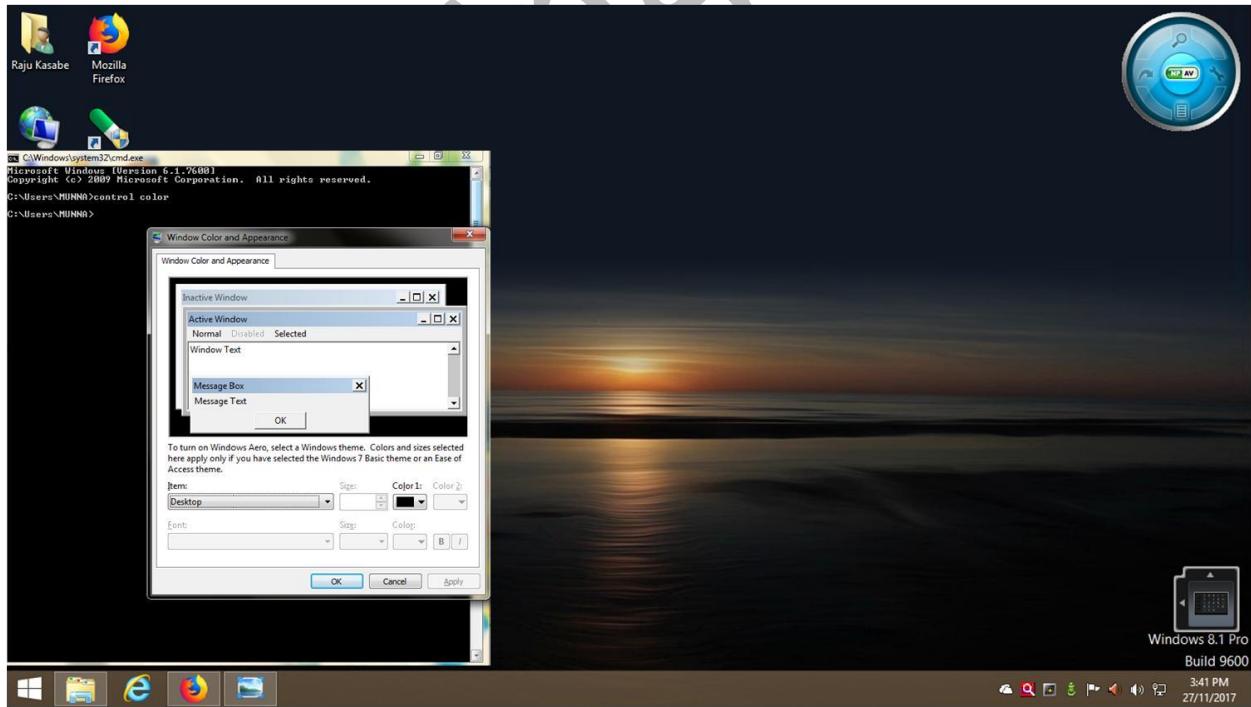
7.control::To open the control panel of the system.



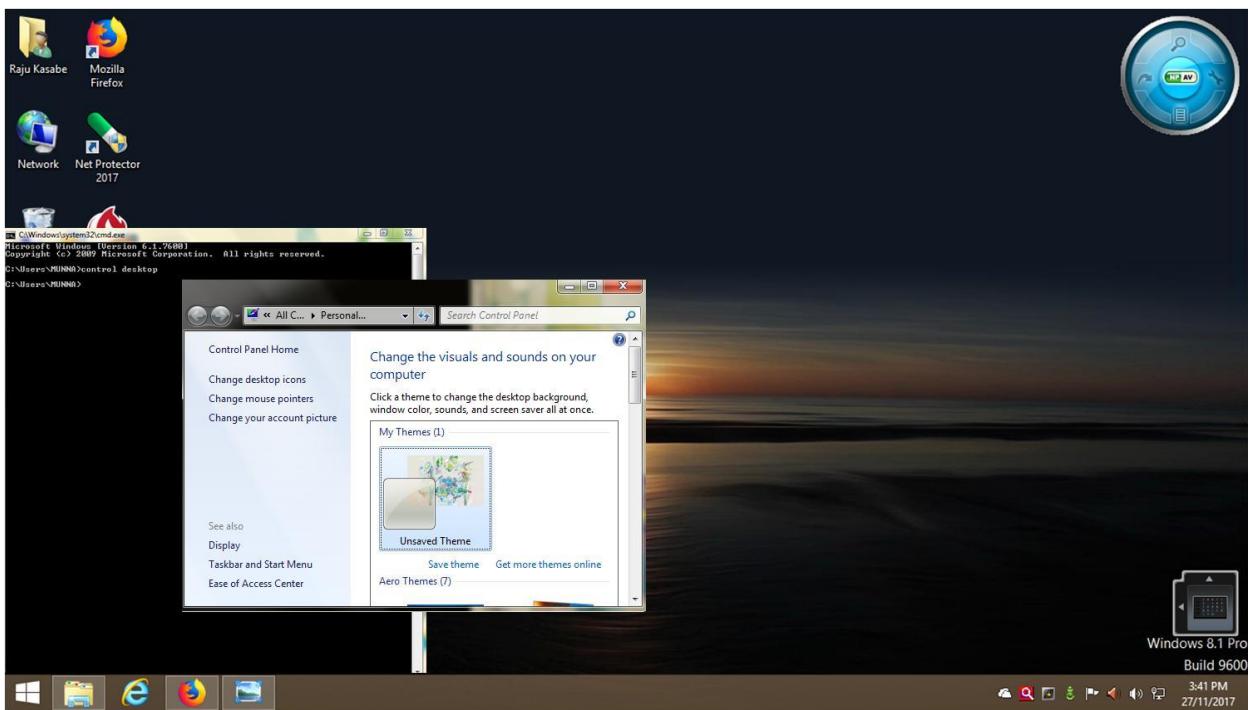
8.controlfonts::To open the font setting of the system.



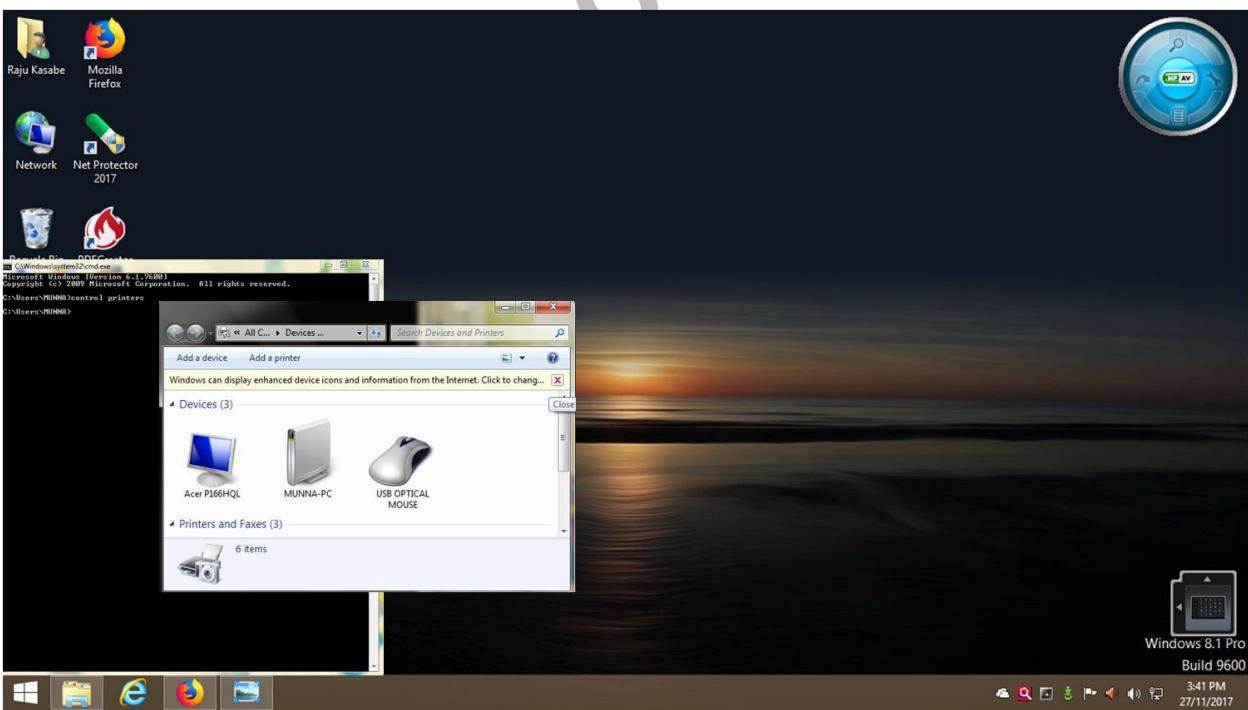
9.controlcolor ::To open the color setting of the system.



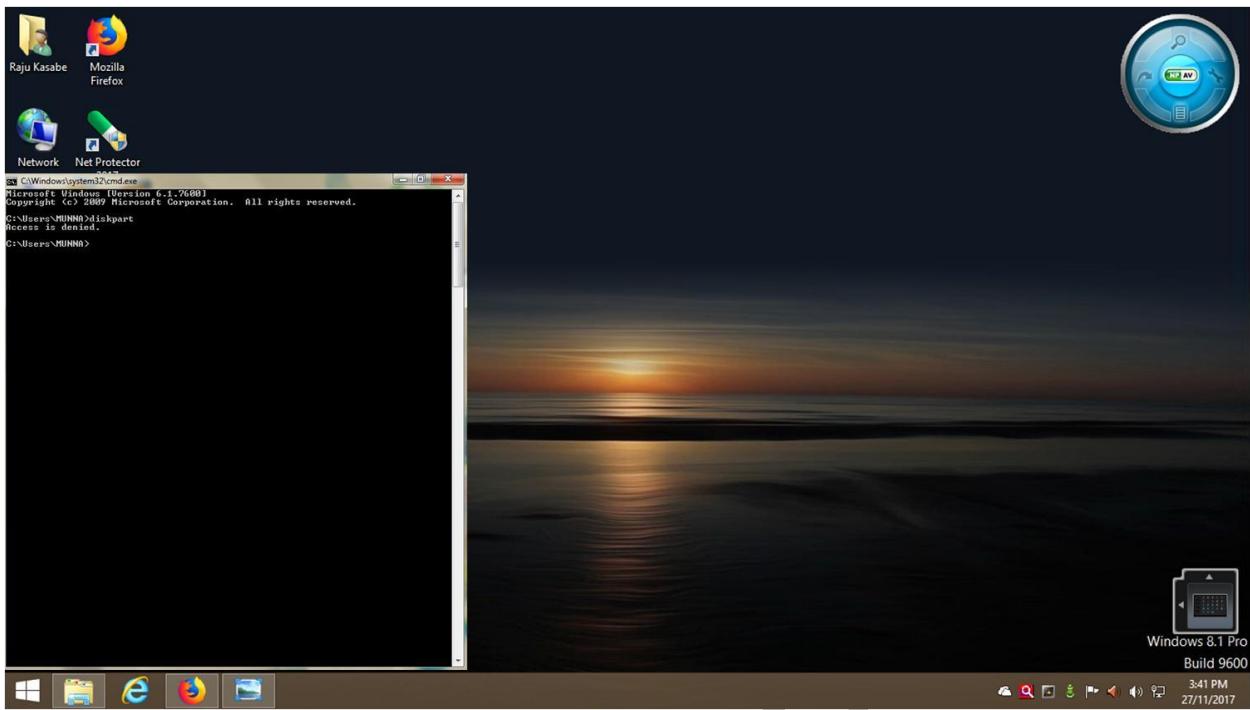
10. control desktop::To open the desk top setting of the system.



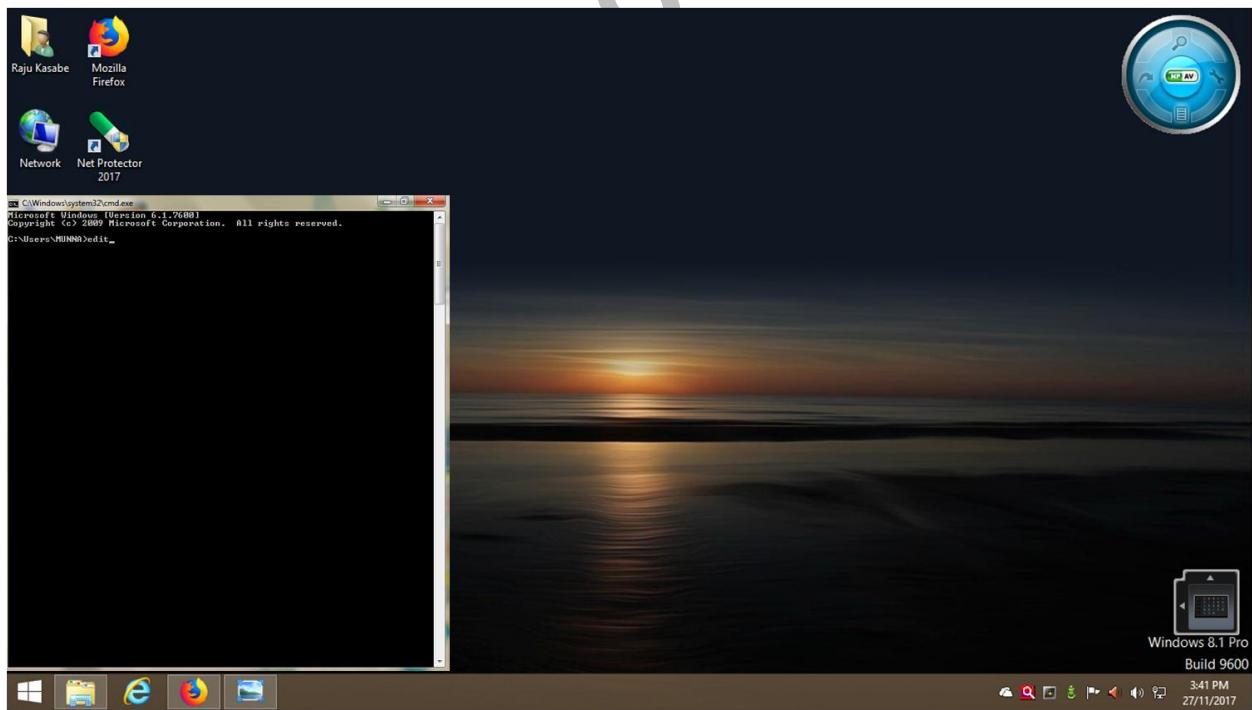
11. control printers::To open the printer setting of the system.

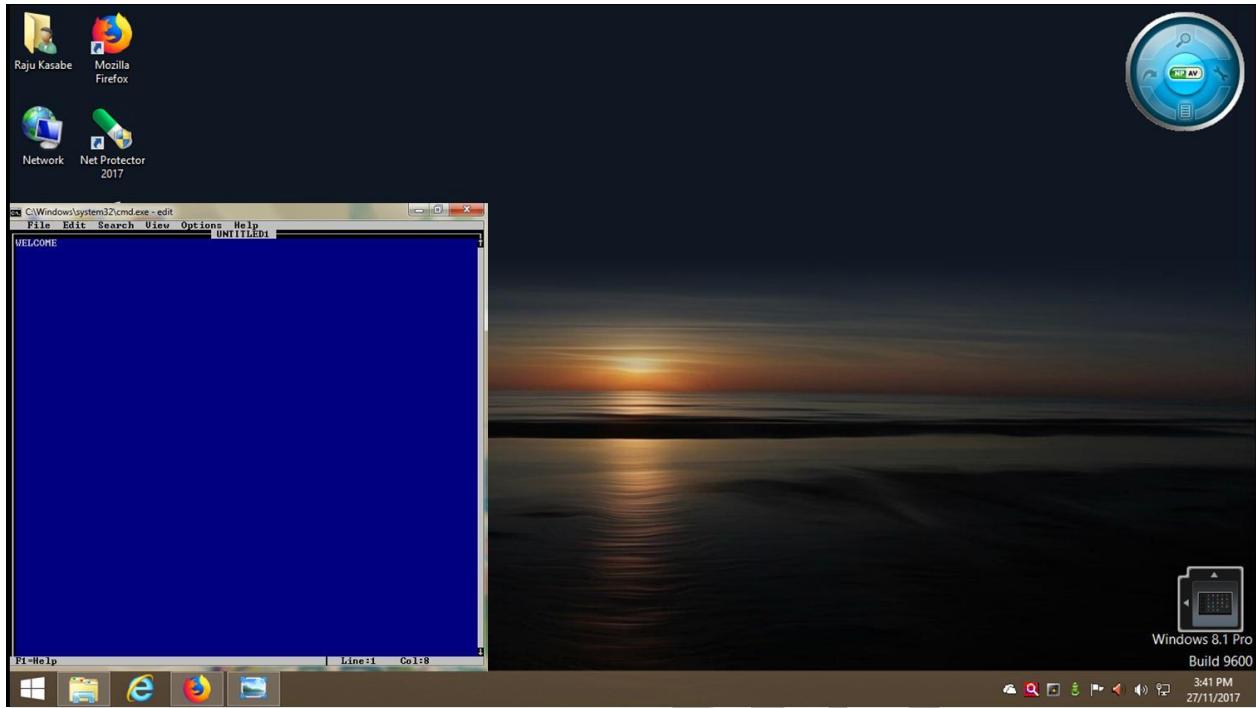


12. disk part::To partition the system disk.

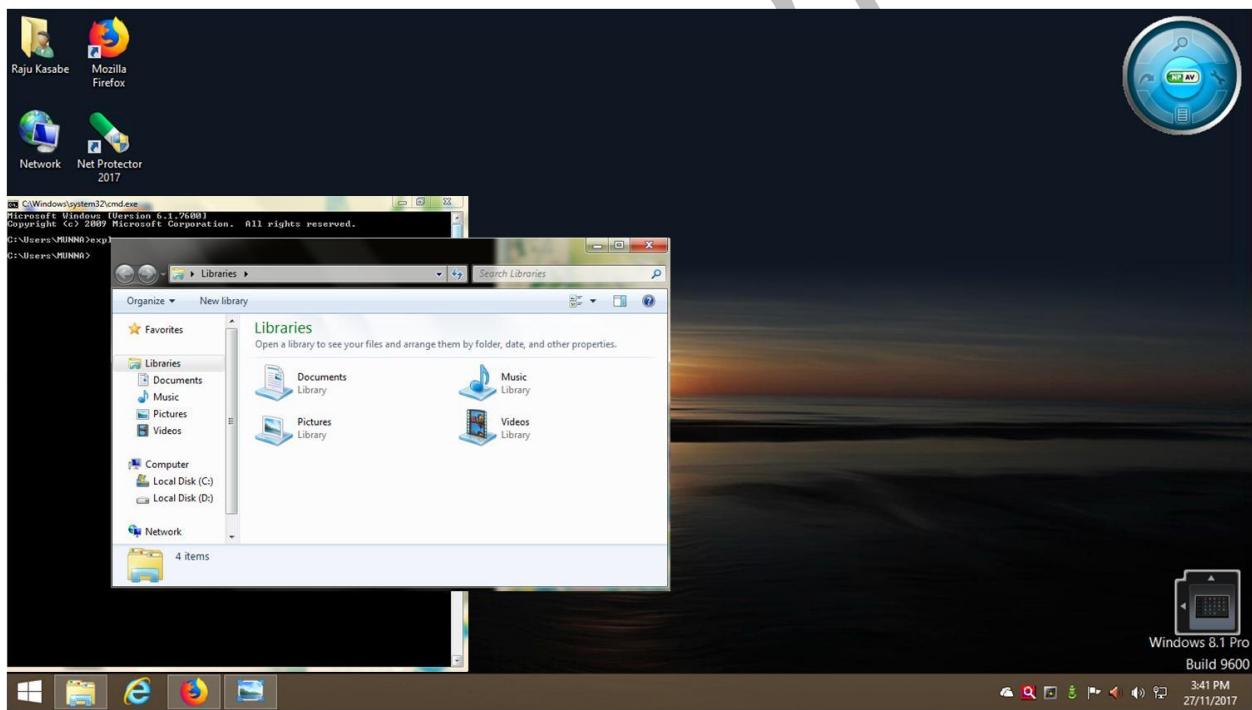


13. edit ::To create new file in the system.

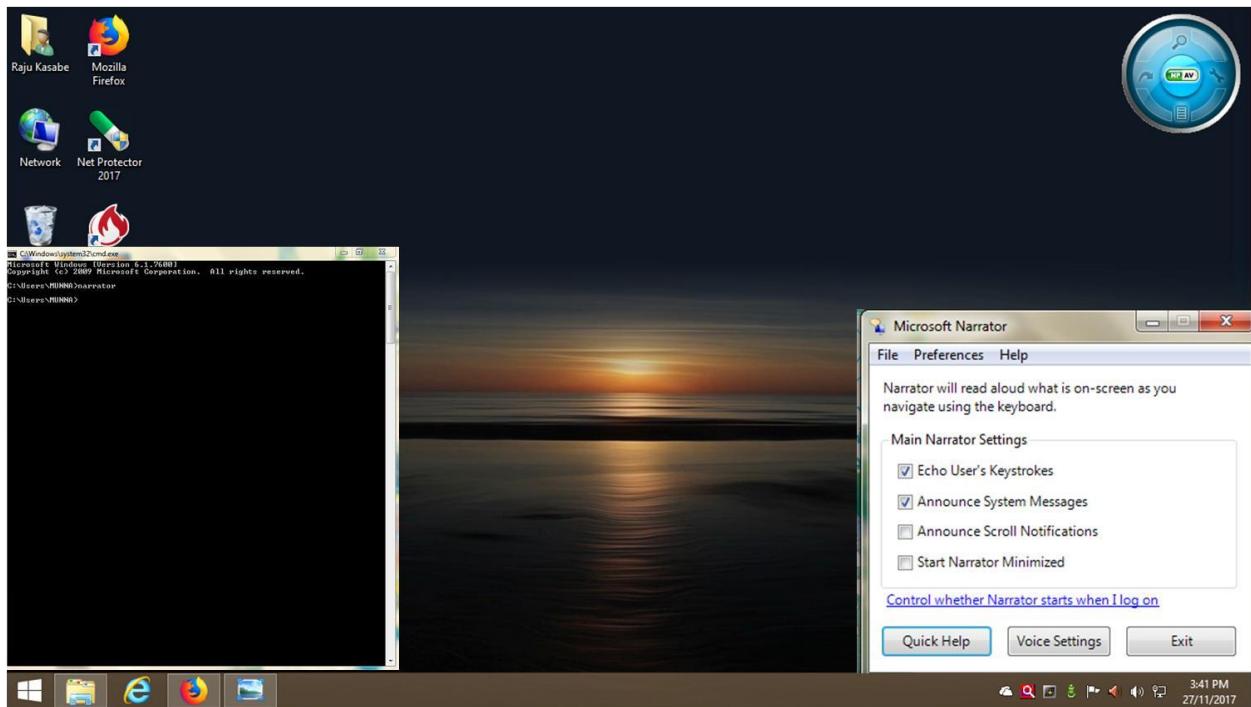




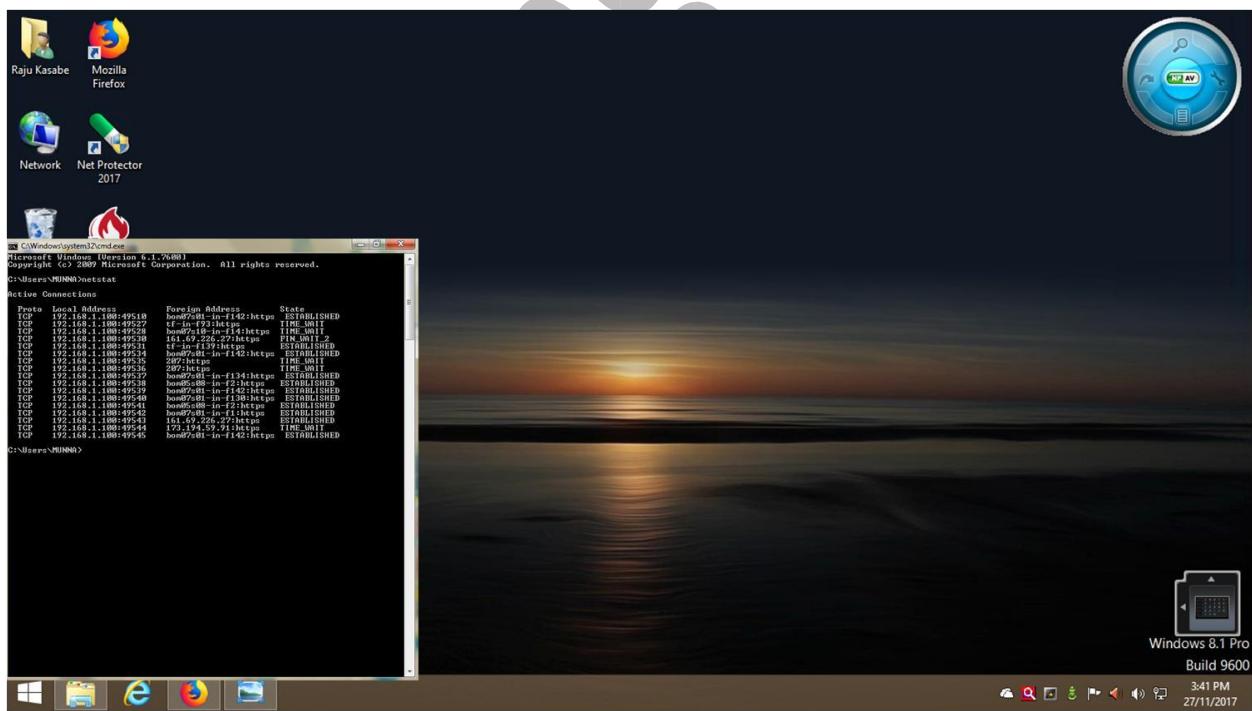
14. explorer:::To open the browser of the system.



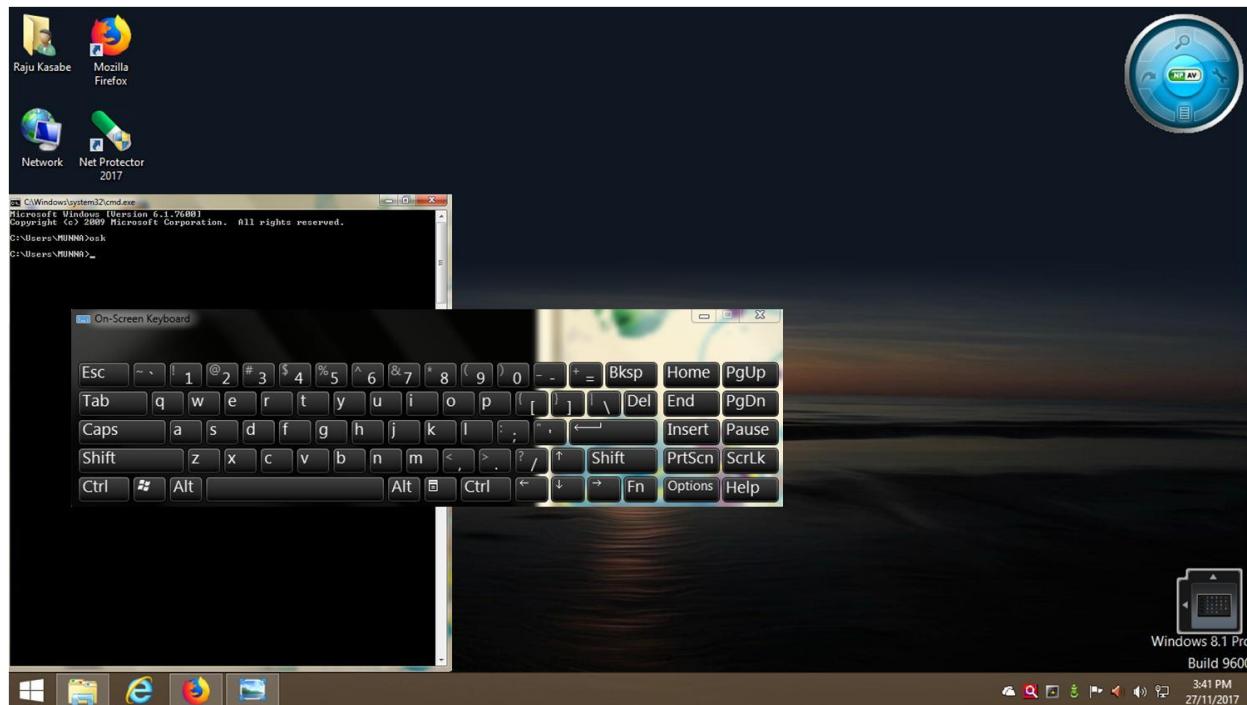
15. narrator:::To start Microsoft narrator.



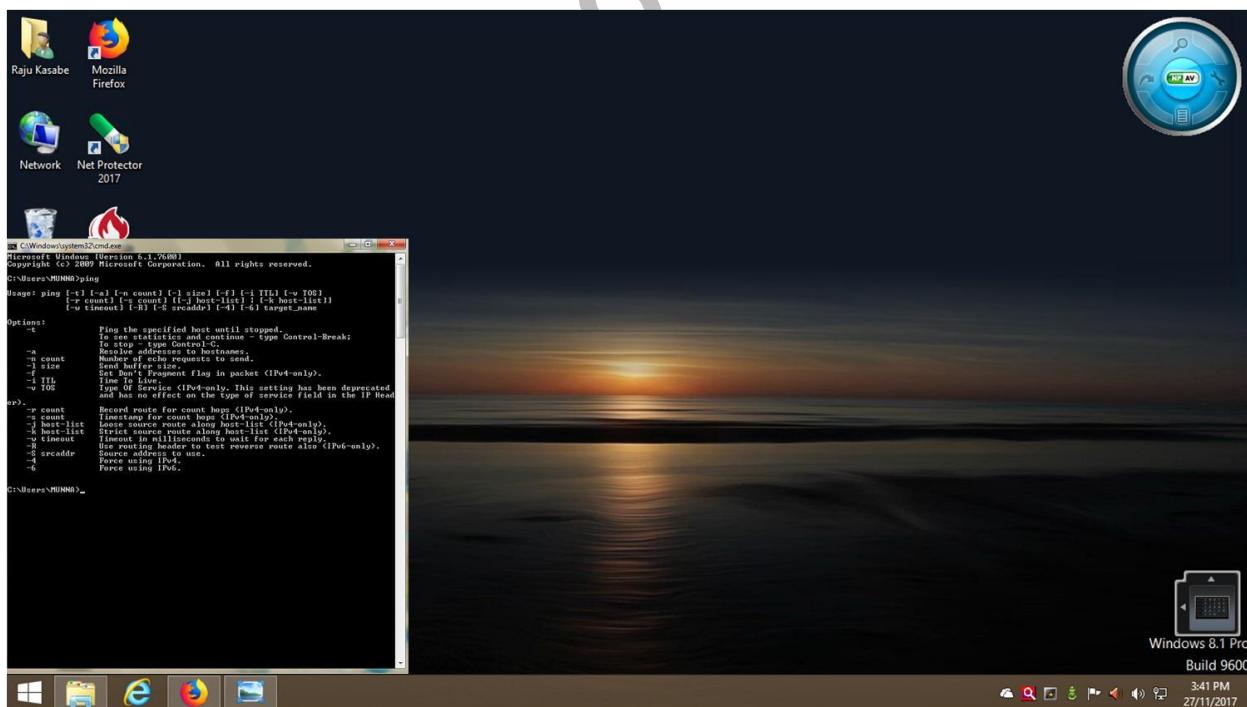
16. netstat::To display all network actives connections.



17. osk::To show on screen keyboard of system.

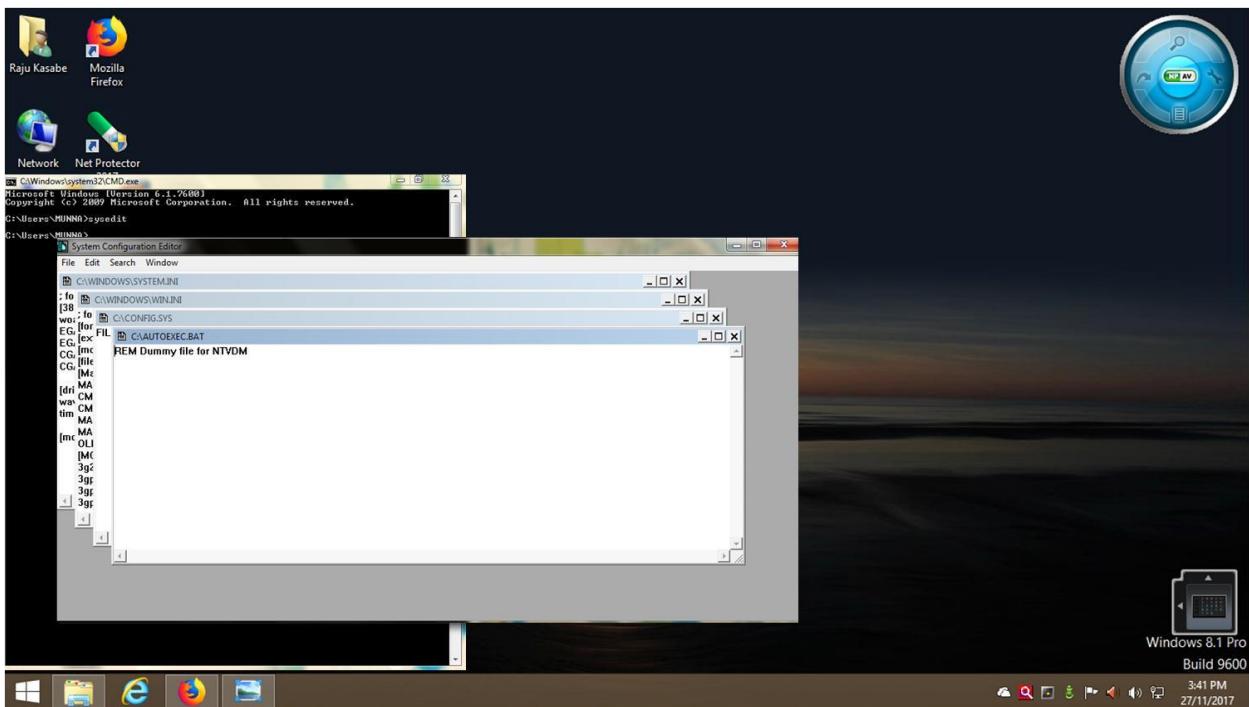


18. ping::To send data to specified IP or host of the system.

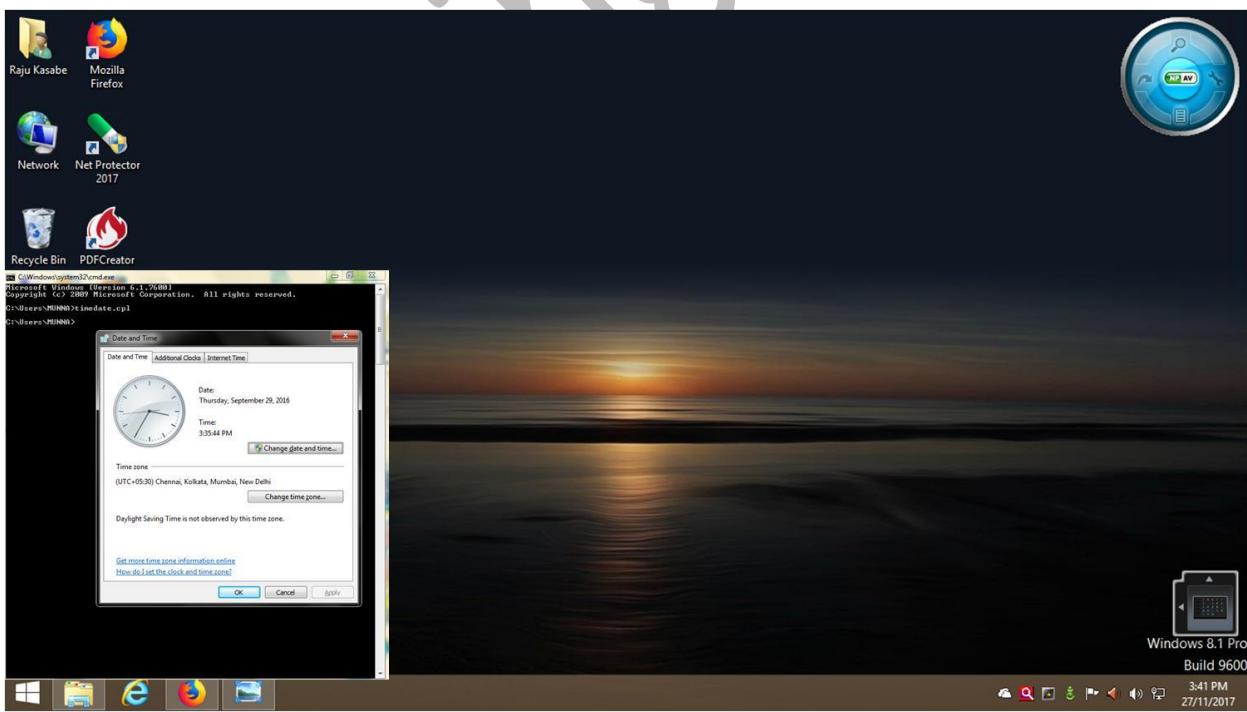


19. sysedit::To edit the system start up files

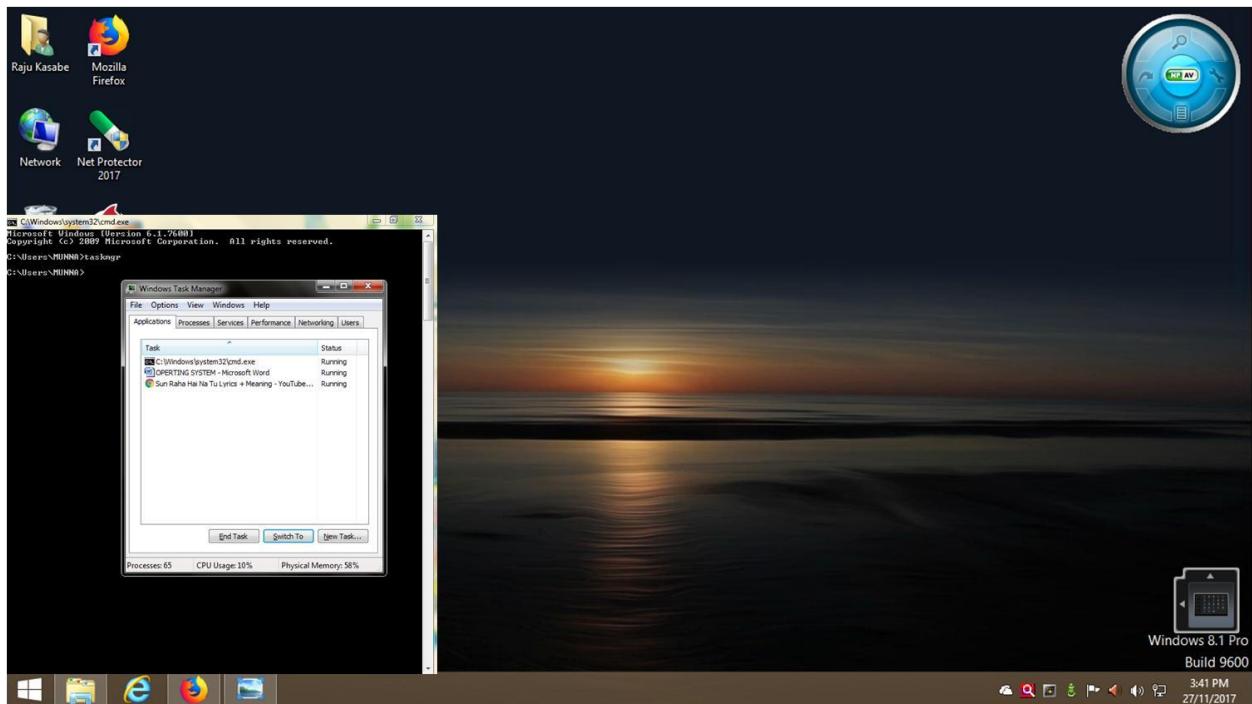
like(SYSTEM.INI,WIN.INI,CONFIG.SYS,AUTOEXEC.BAT)



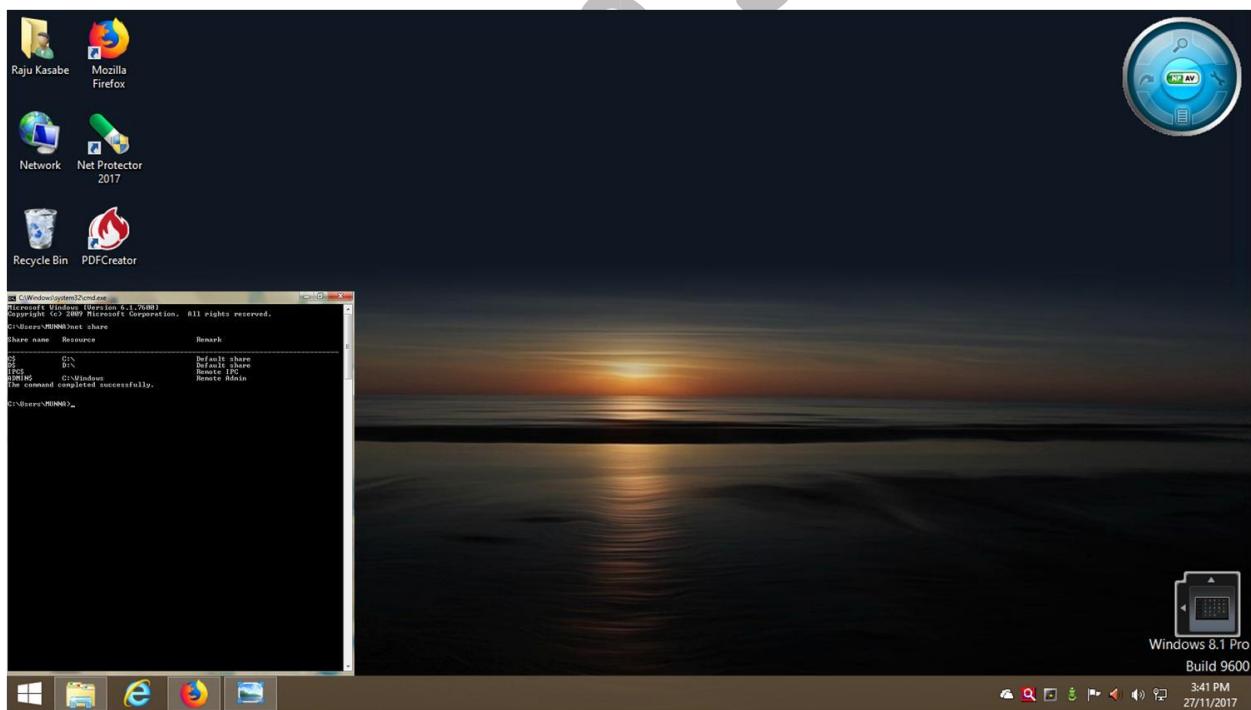
20. timedate.cpl::To open the system date and time.



21. task mgr::To open the windows task manager.



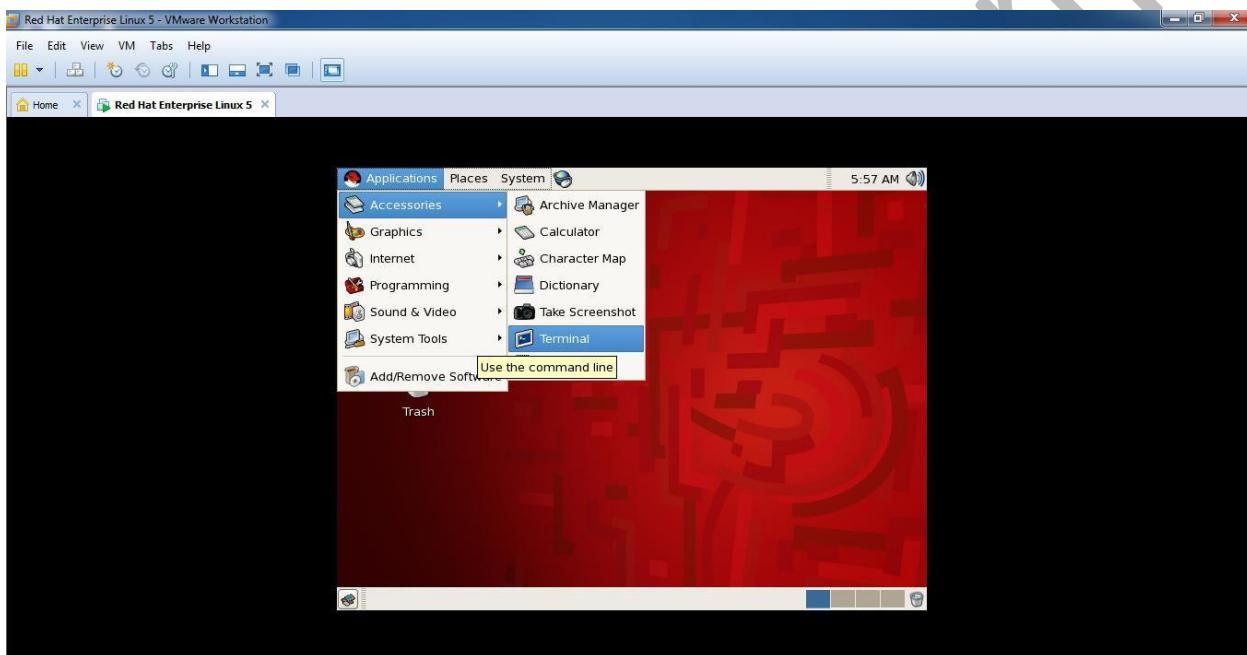
22. net share::To create and share the user.

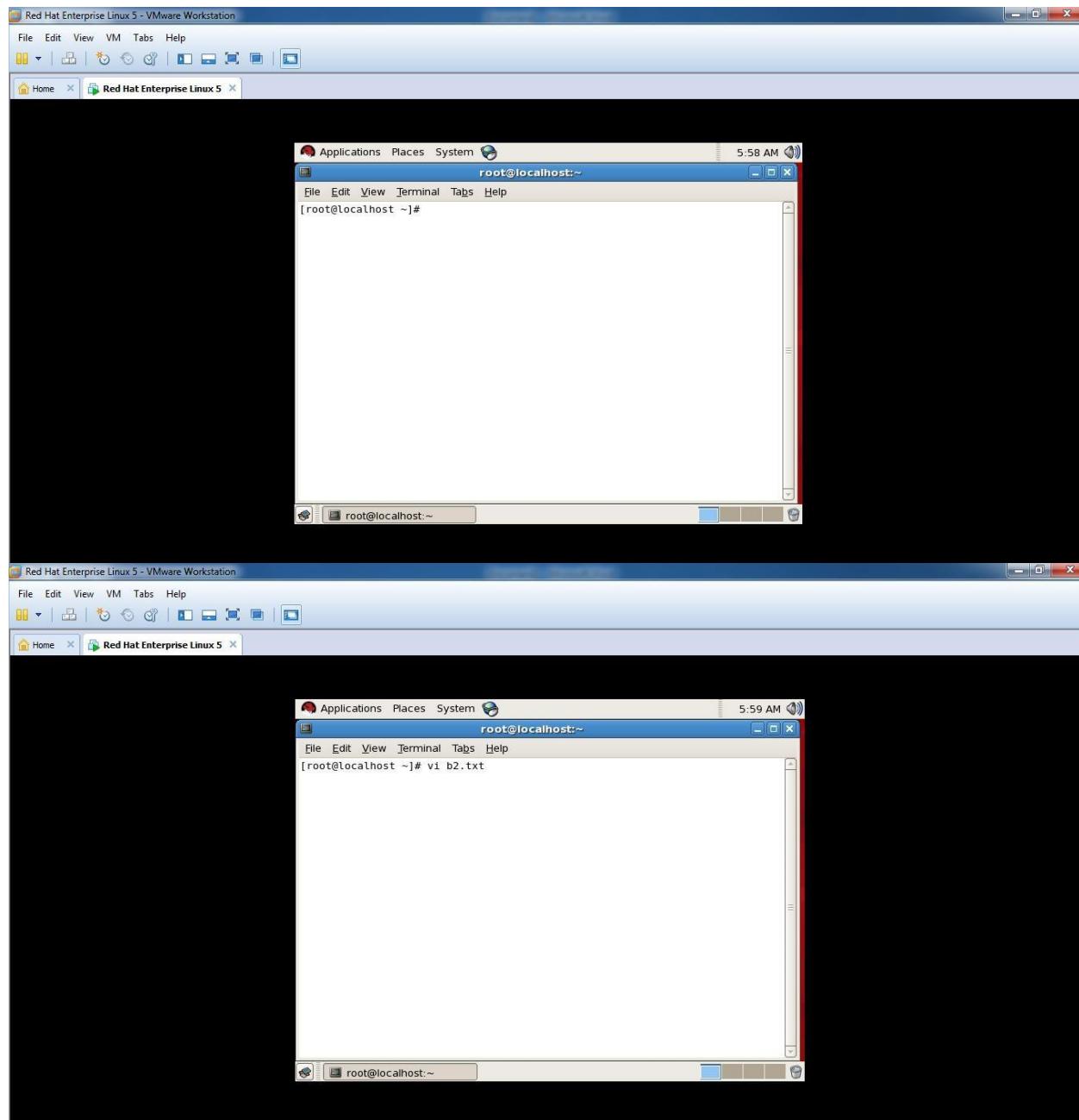


PRACTICAL NO.:9

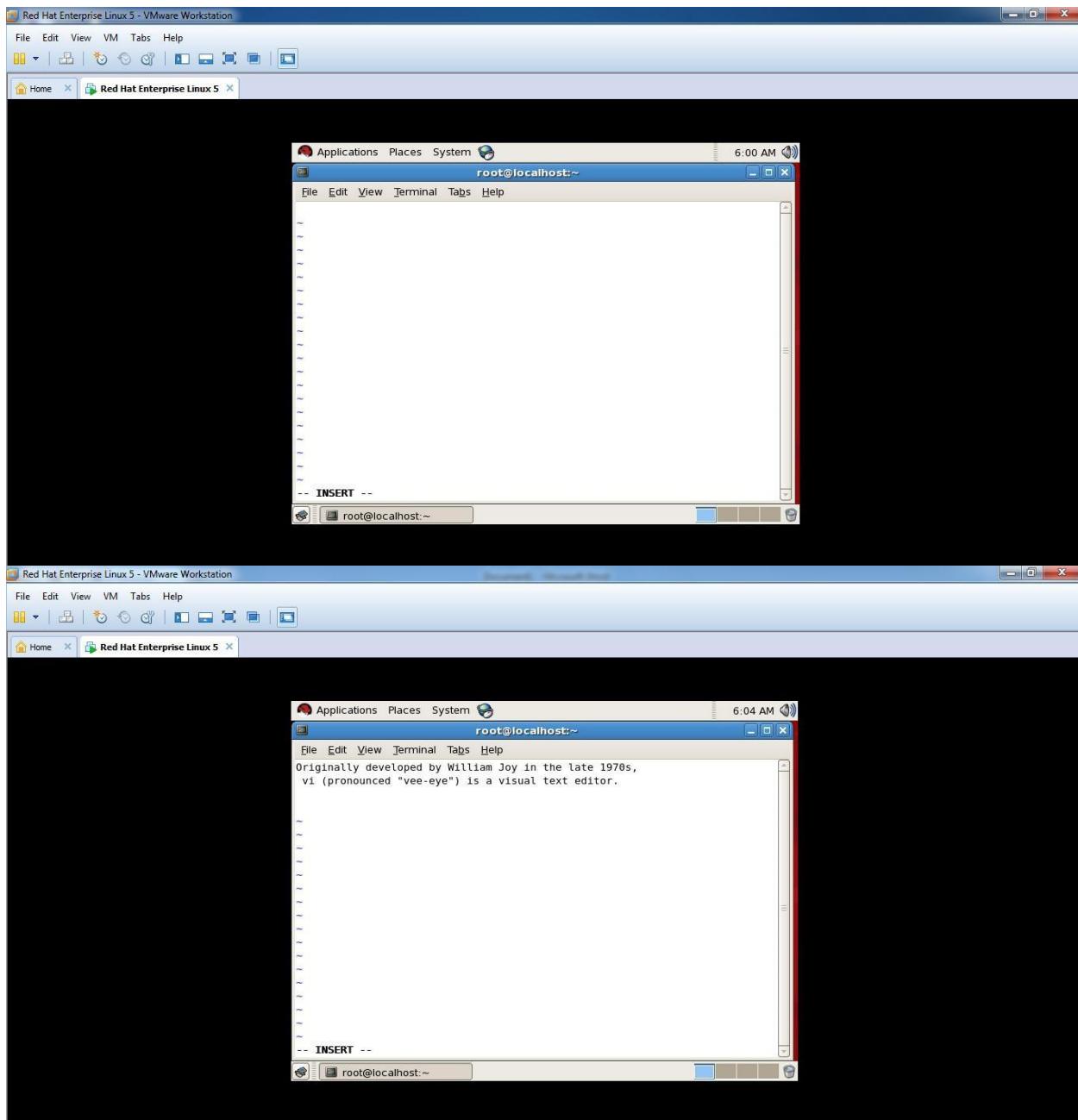
Aim: Working with Linux desktop and utilities.

Vieditor::vi is actually the command which starts the visual mode of, the landmark editing program developed by Joy. As it gained popularity, Joy noticed that most users were exclusively using its visual mode, so to make things more convenient for issuers, headed a link to which started it in visual mode automatically.

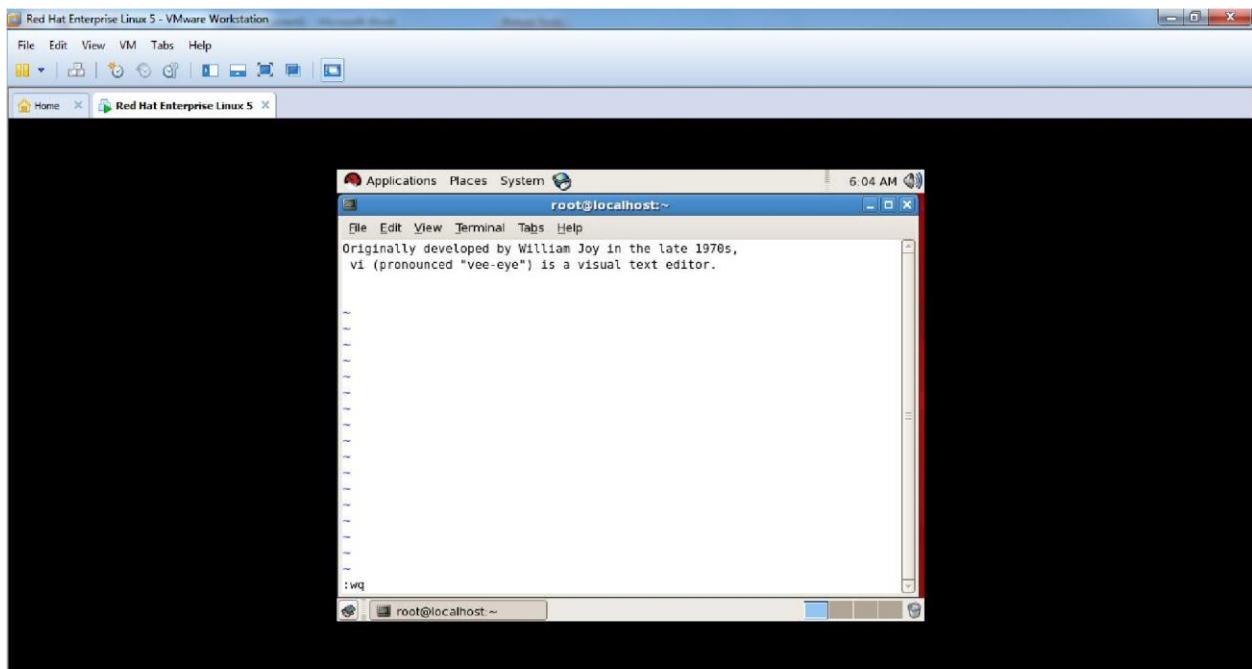




Q2



Q&P



Operating Sys

Red Hat Enterprise Linux 5 - VMware Workstation

File Edit View VM Tabs Help

Home Red Hat Enterprise Linux 5

Applications Places System root@localhost:~ 6:06 AM

root@localhost ~]# vi b2.txt
[root@localhost ~]# cat b2.txt
Originally developed by William Joy in the late 1970s,
vi (pronounced "vee-eye") is a visual text editor.

[root@localhost ~]#

Red Hat Enterprise Linux 5 - VMware Workstation

File Edit View VM Tabs Help

Home Red Hat Enterprise Linux 5

Applications Places System root@localhost:~ 6:08 AM

root@localhost ~]# vi b2.txt
[root@localhost ~]# cat b2.txt
Originally developed by William Joy in the late 1970s,
vi (pronounced "vee-eye") is a visual text editor.

[root@localhost ~]# ls
anaconda-ks.cfg Desktop nfsl sumiya t5
b2.txt grep s1 t1 t6
backup.tar install.log.gz s2 t2 t7
BNN install.log.syslog String t3 t8
chmod locate sudo t4 test.txt

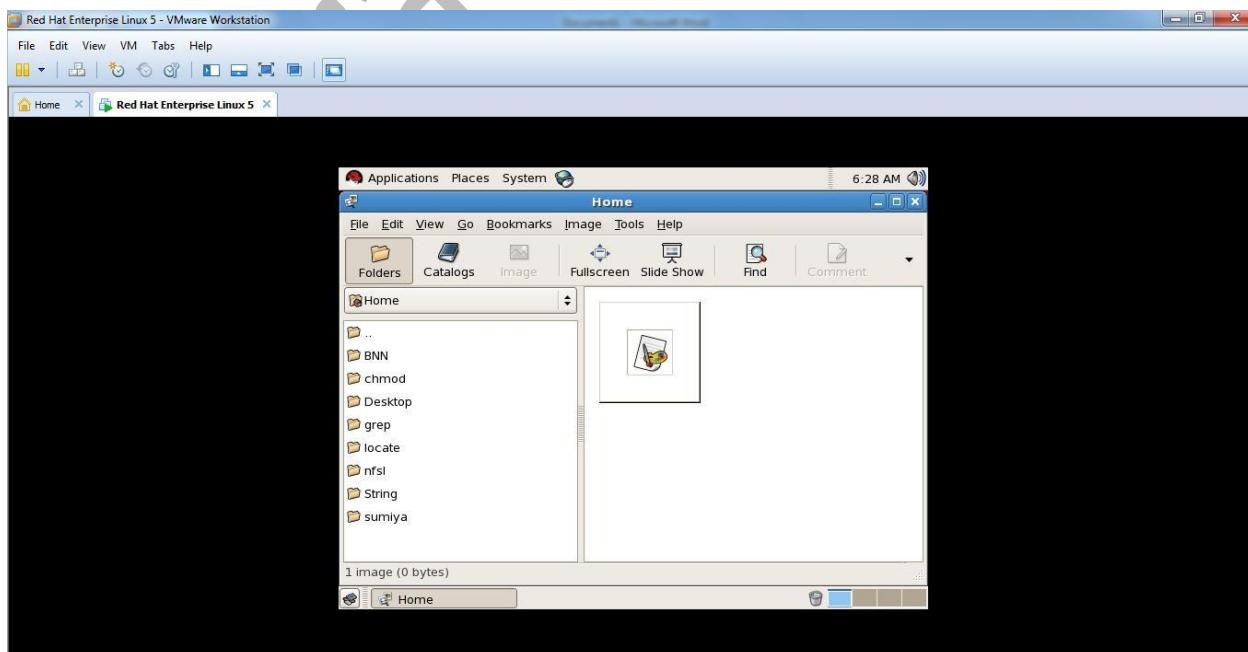
[root@localhost ~]#

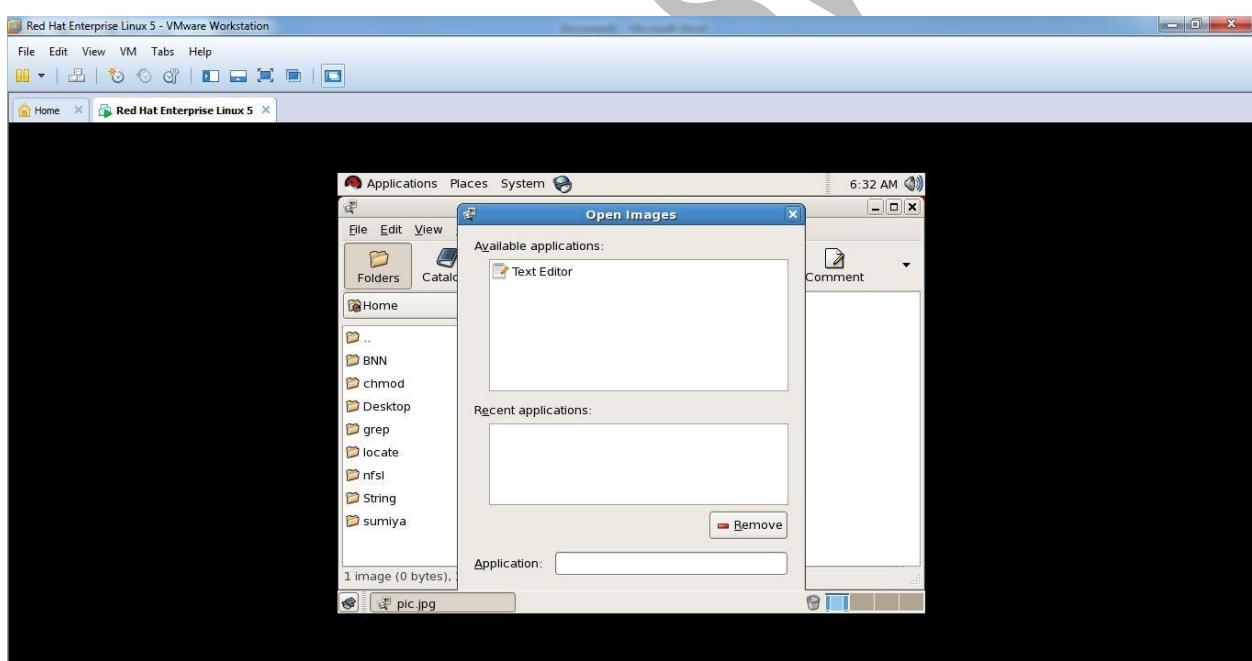
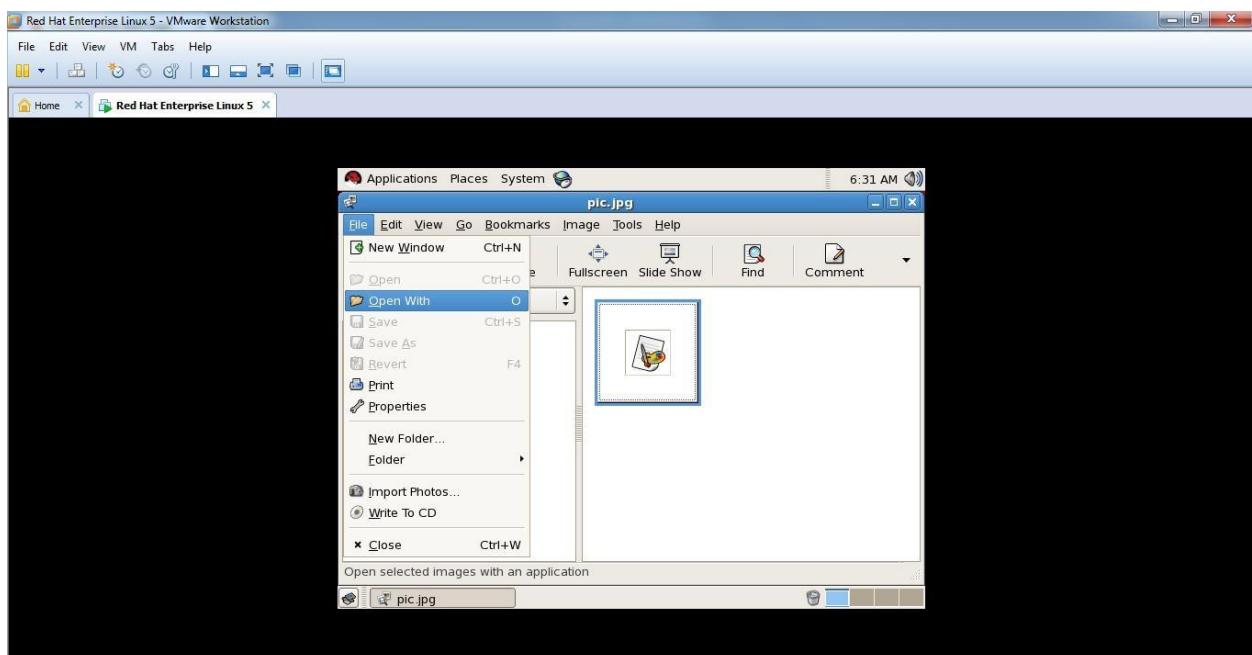
Q&A

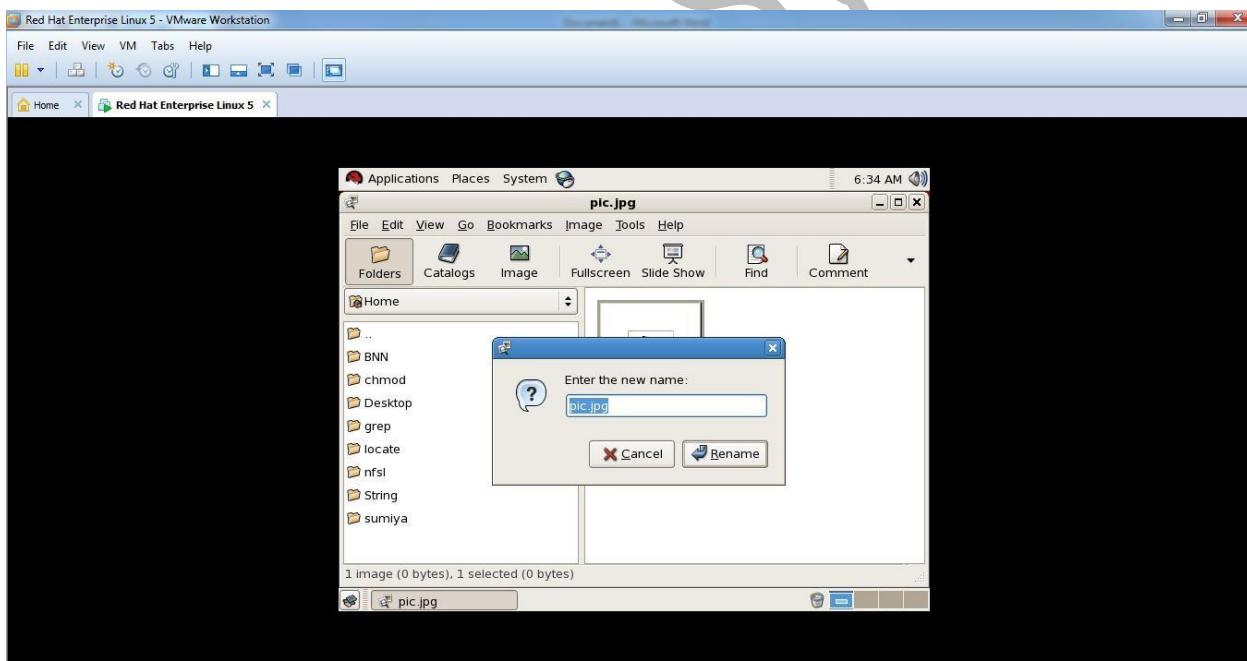
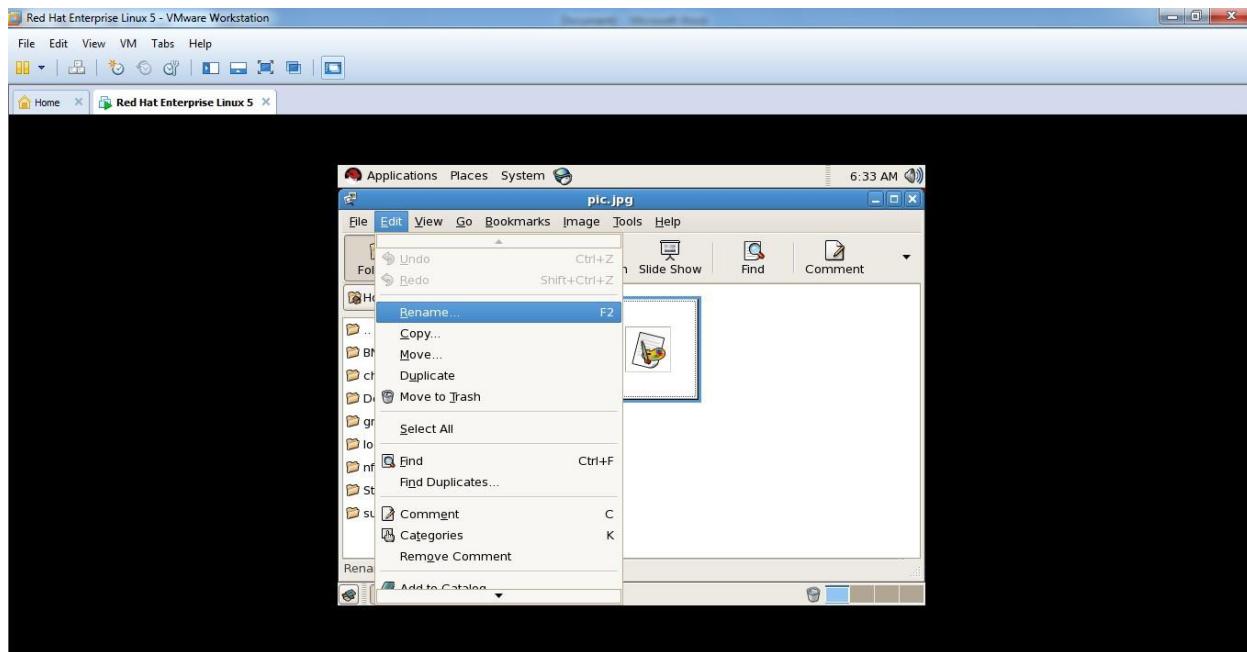
2.Graphics::A graphics processing unit(GPU), also known as visual processing

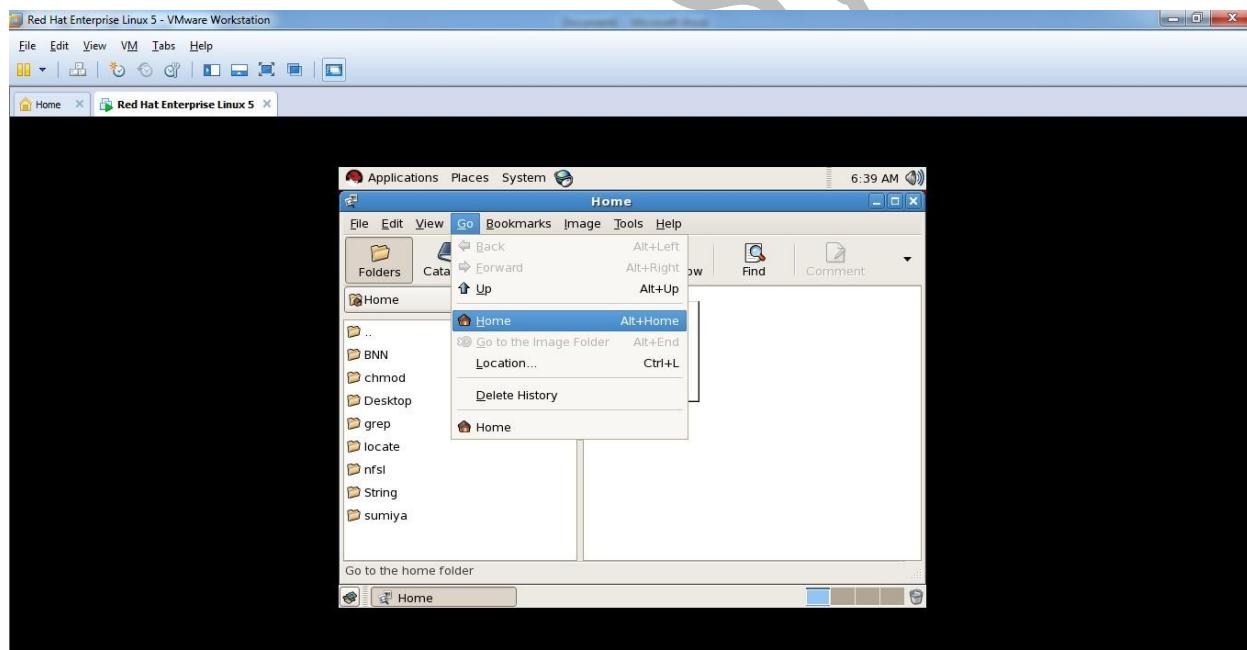
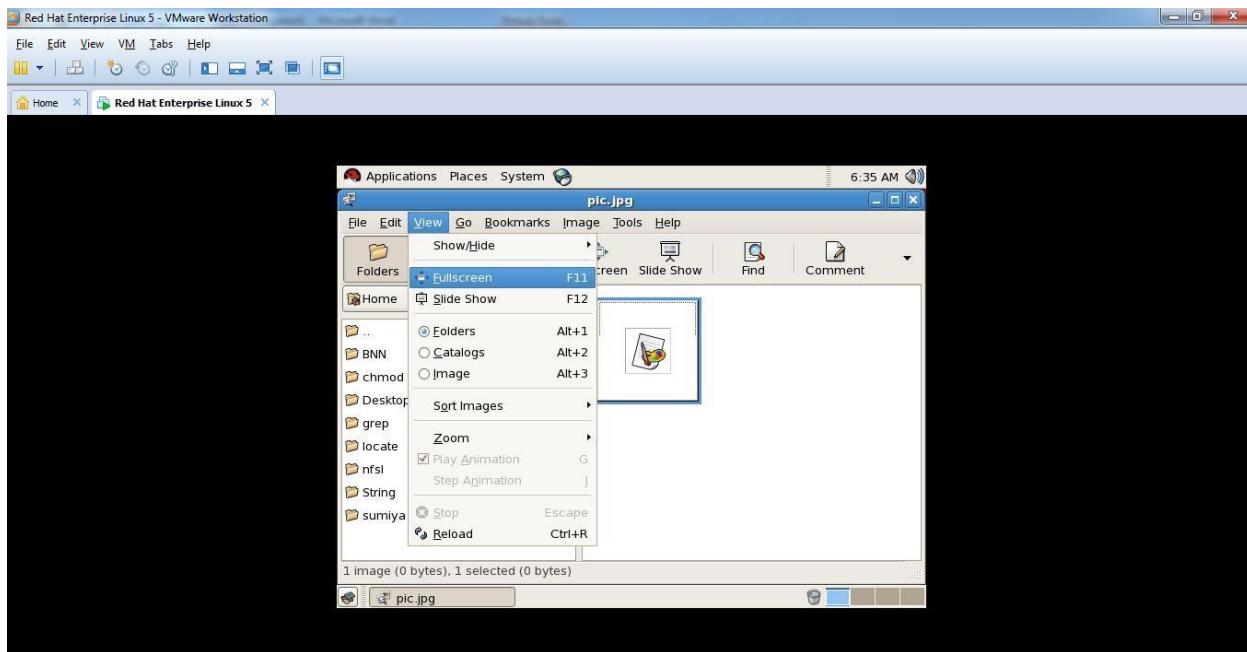
unit

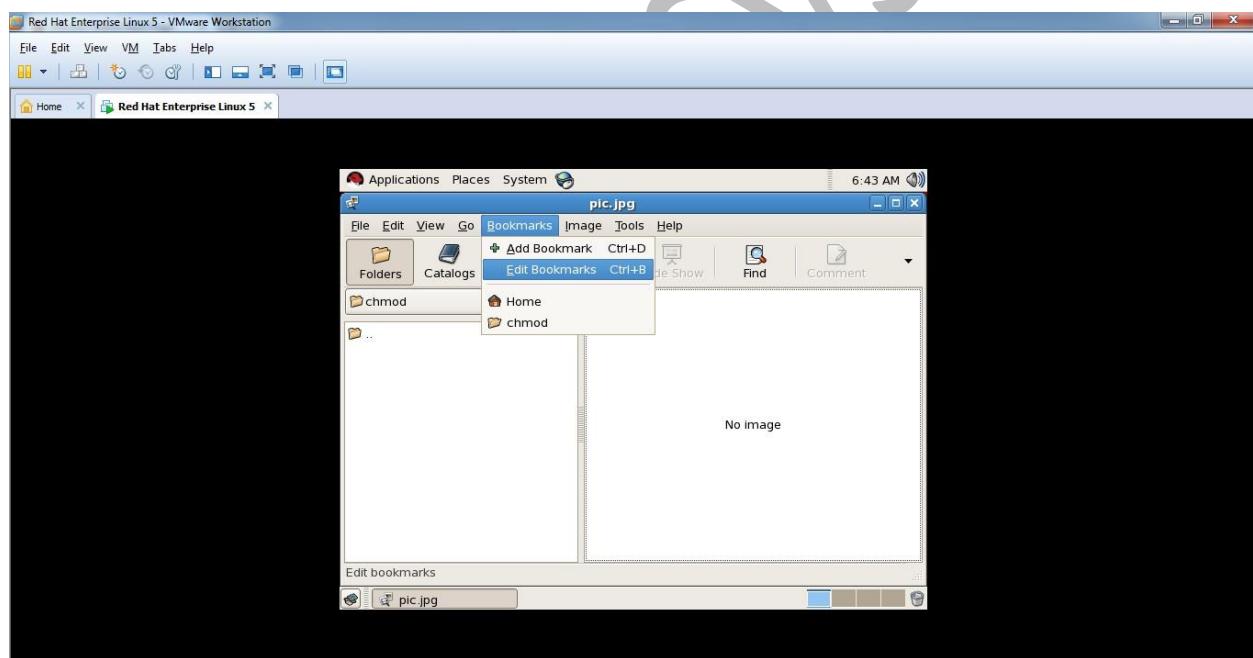
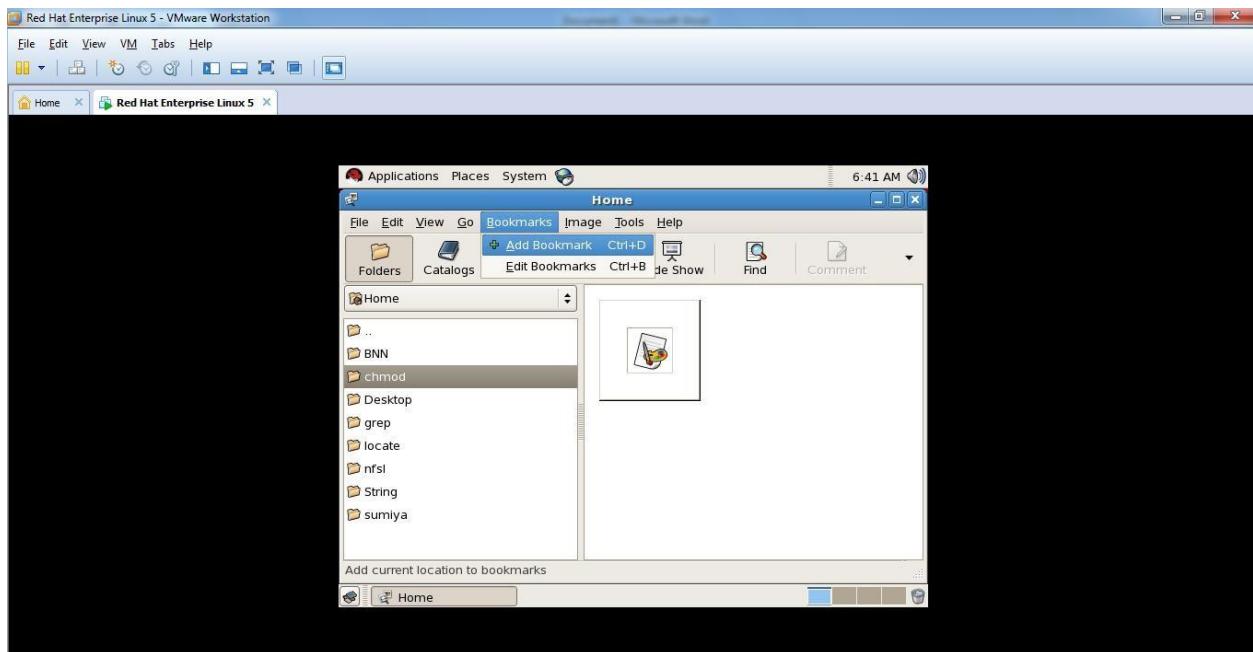
(VPU), is a specialized electronic circuit designed to rapidly manipulate and alter Memory to accelerate the creation of images in a frame buffer intended for output to display.

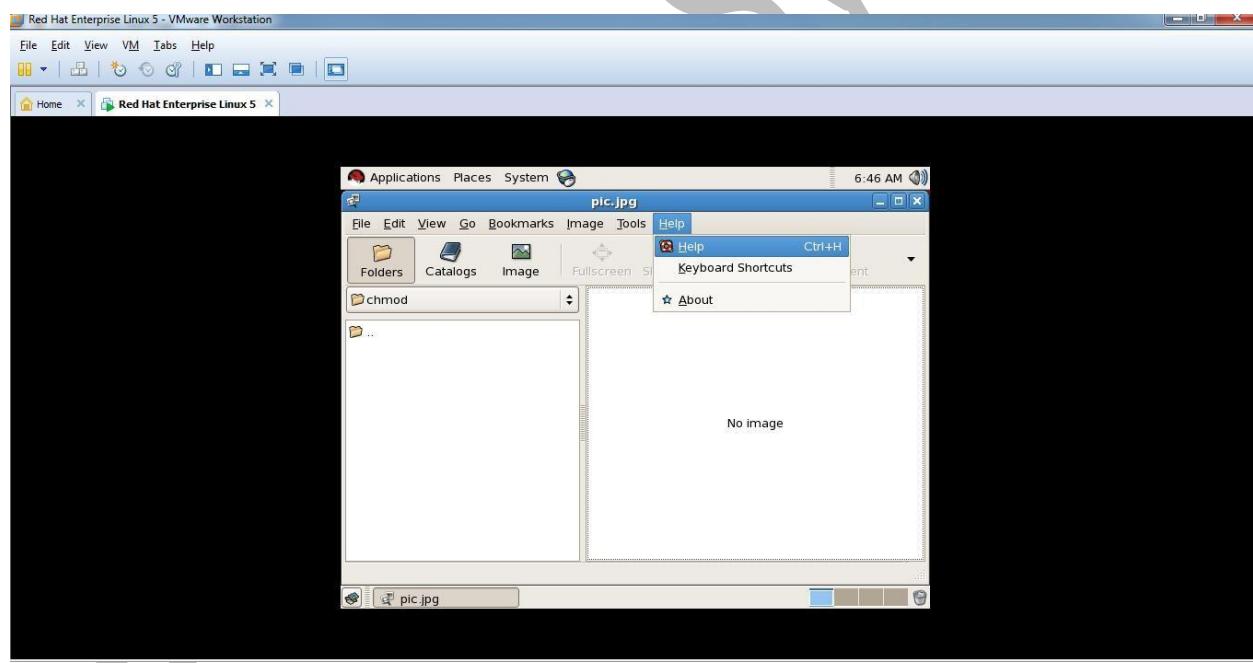
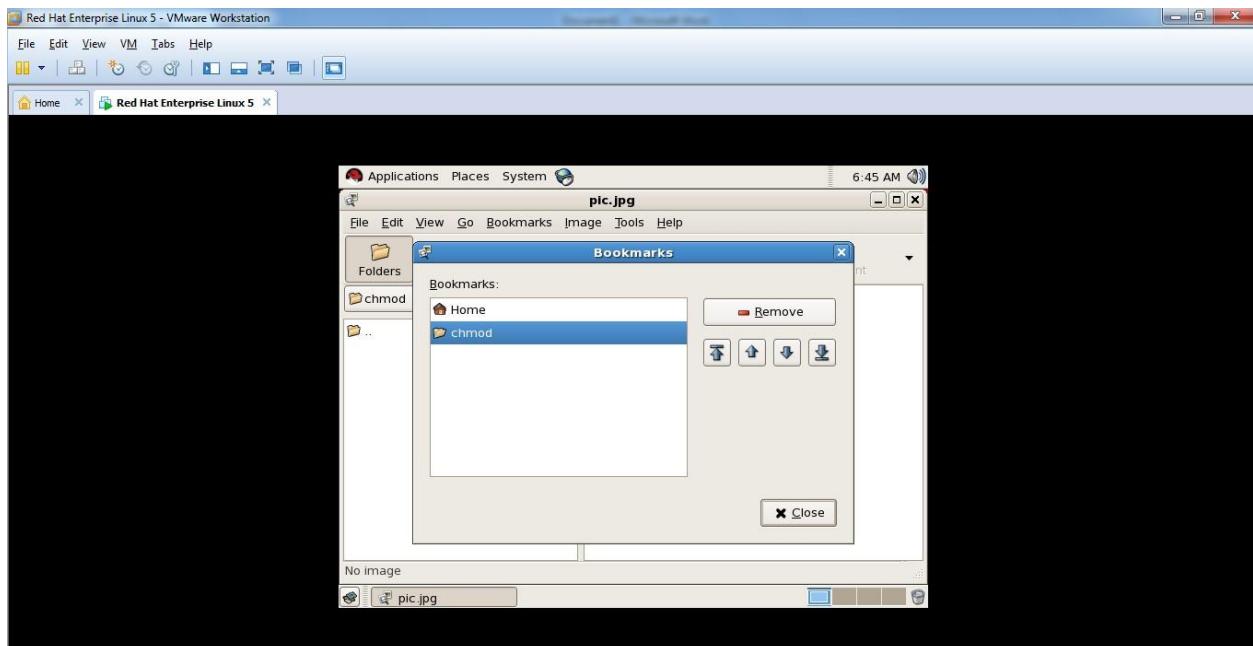


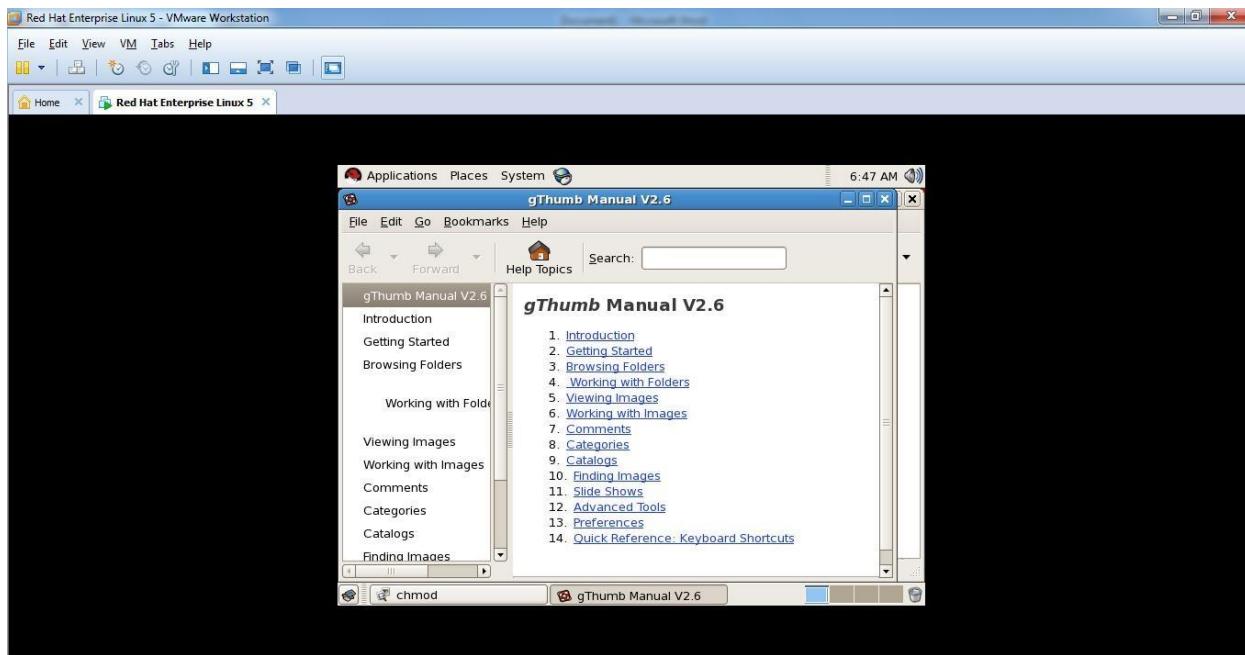






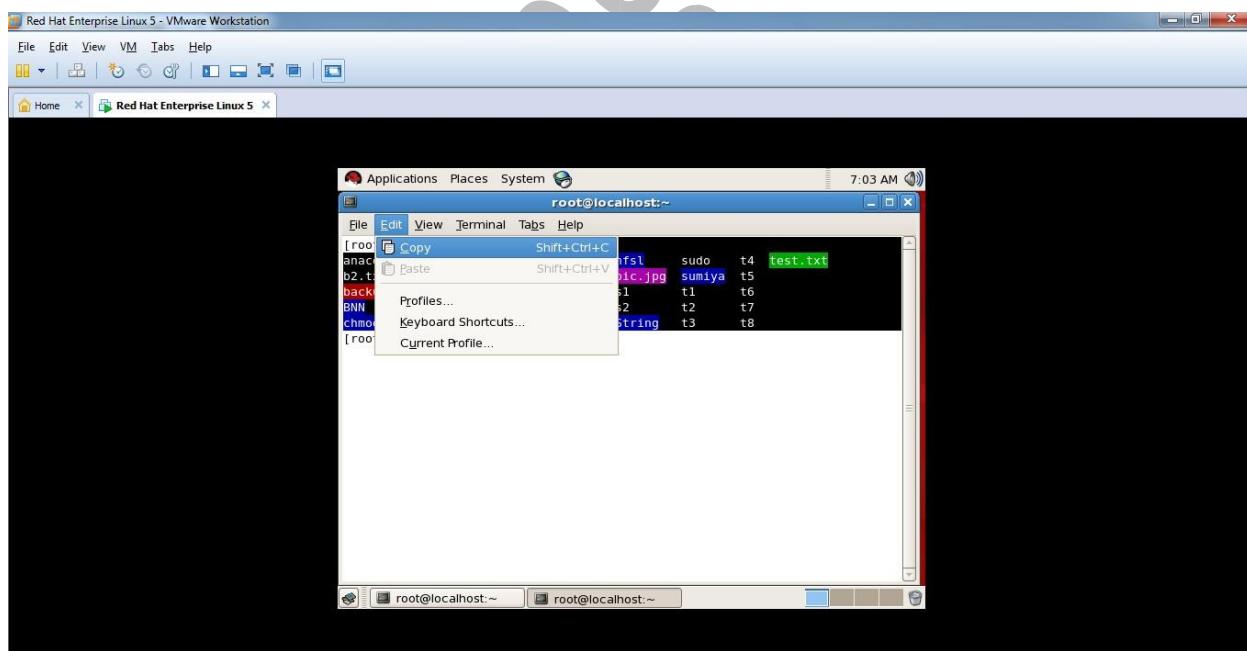
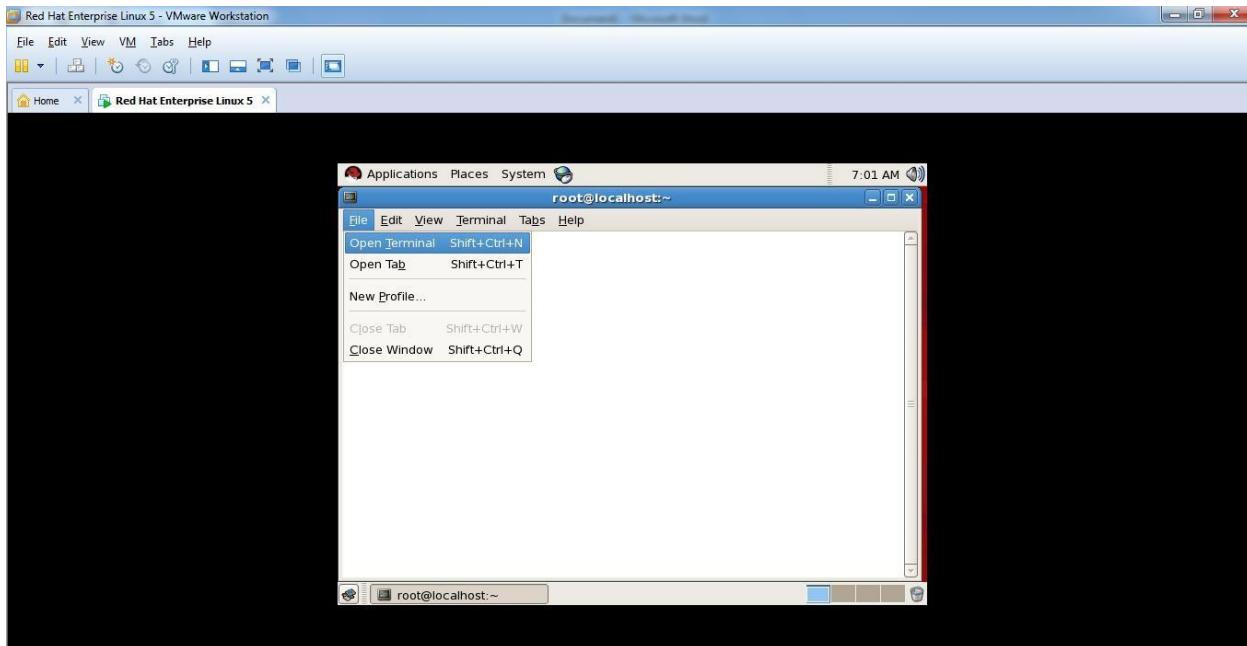


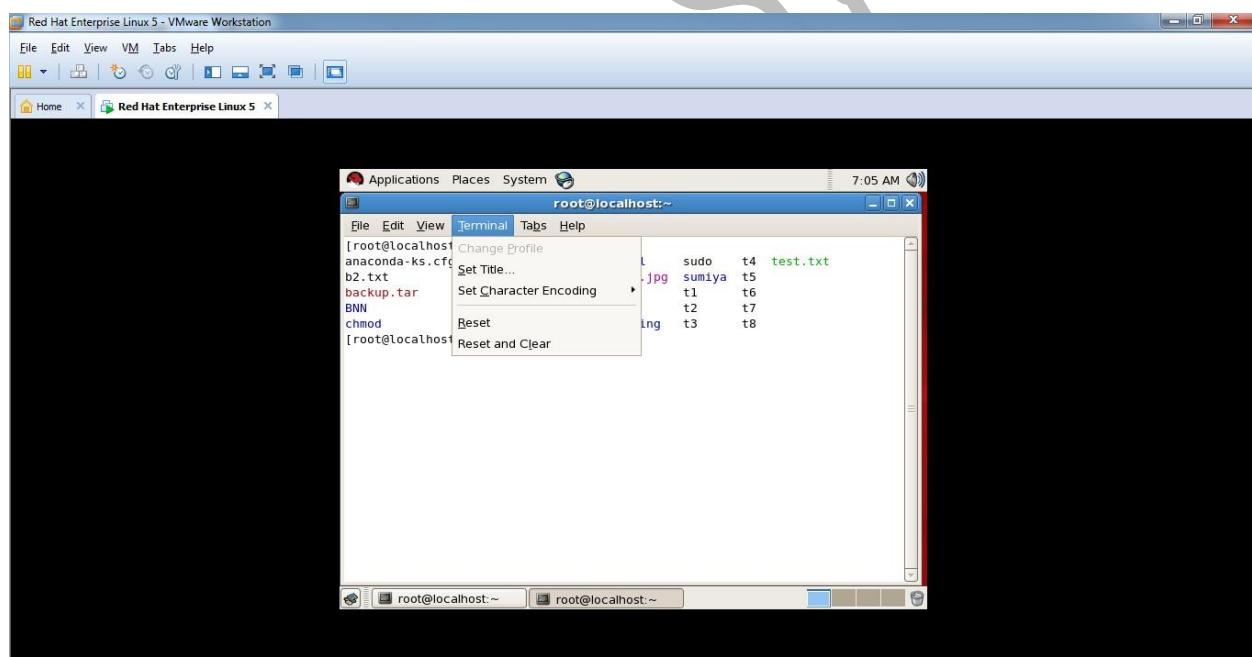
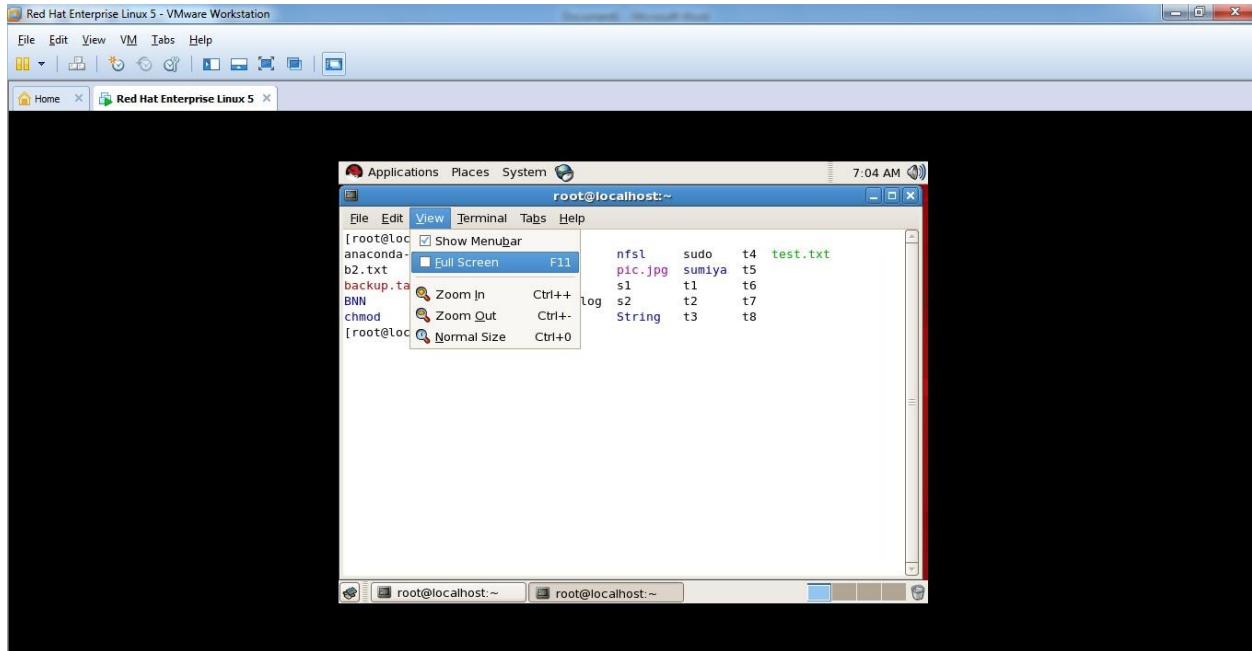


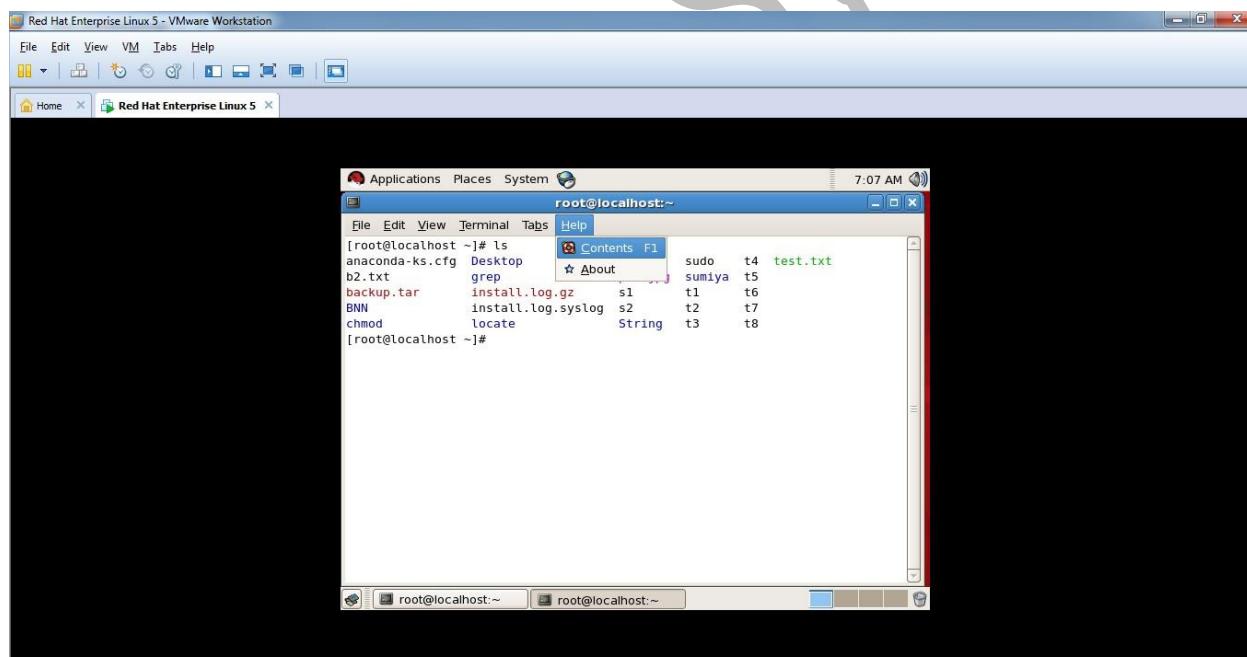
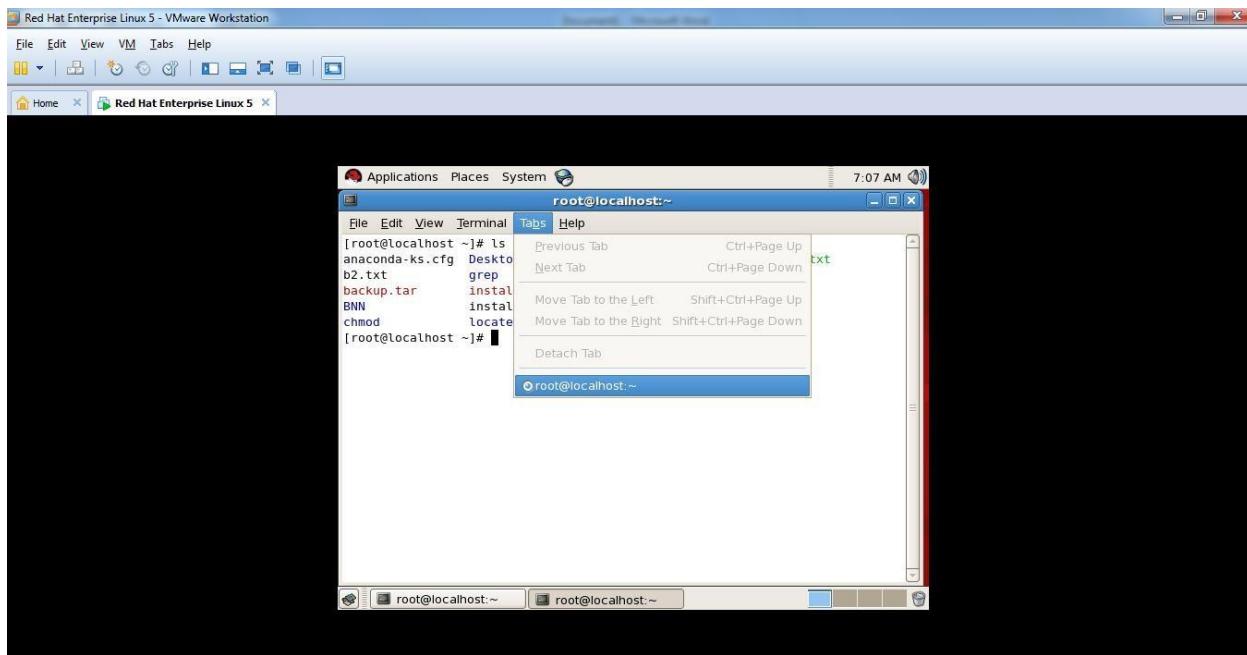


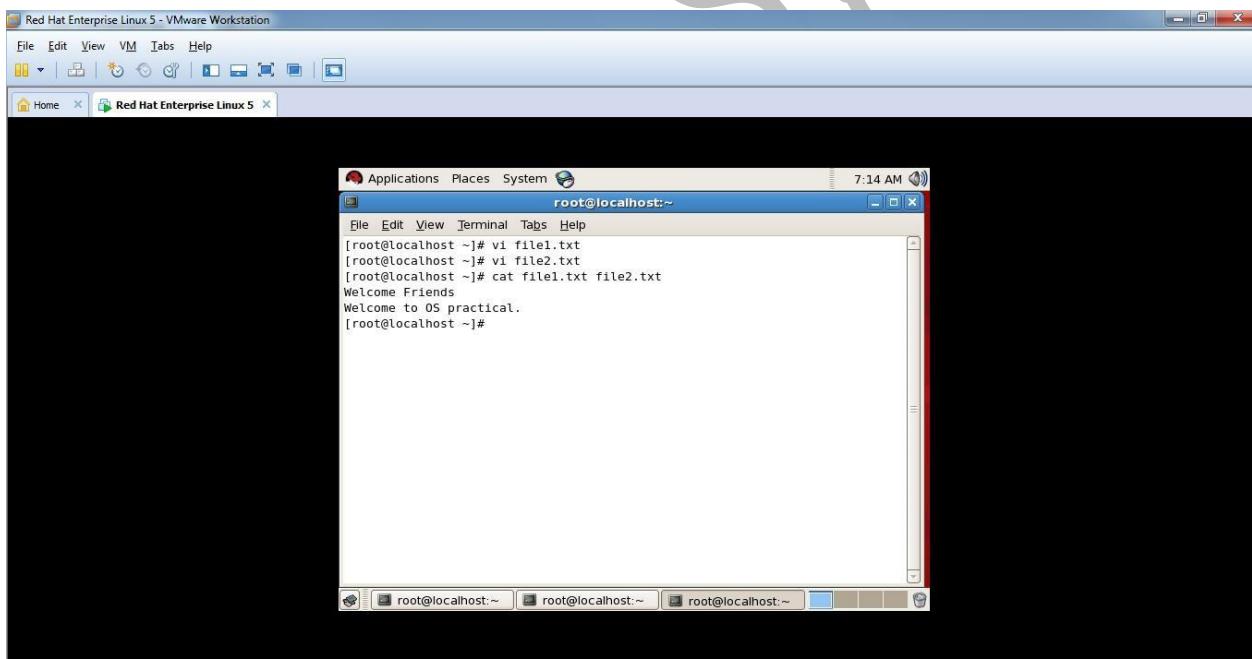
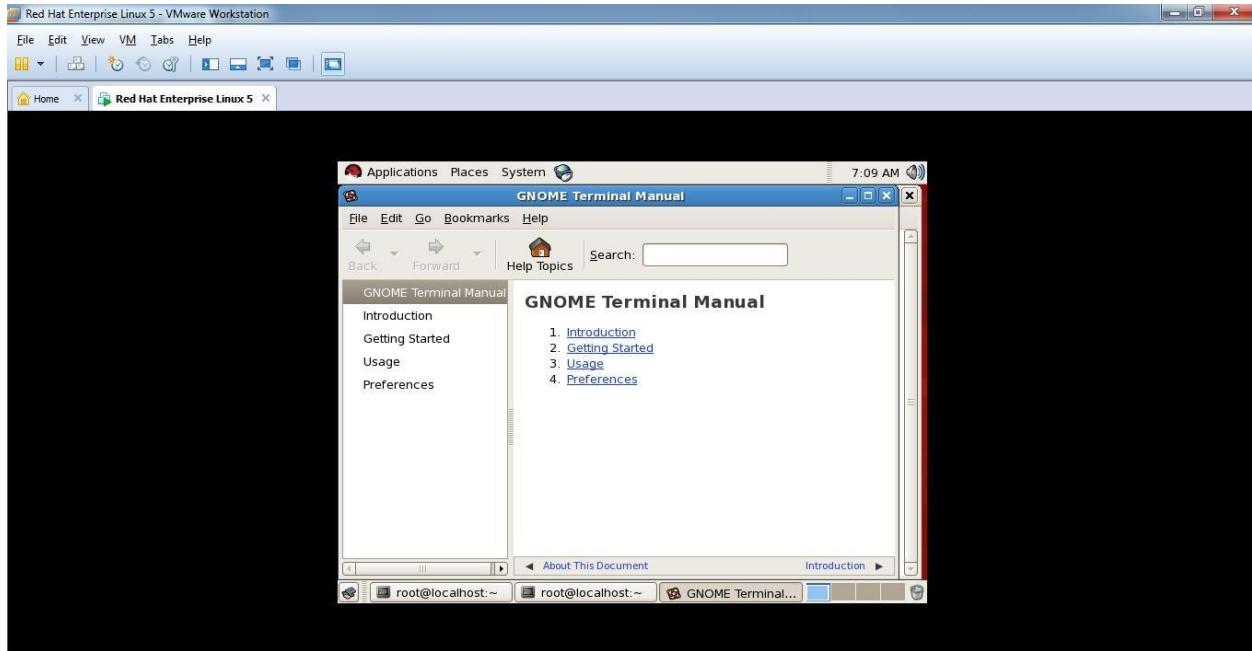
3.Terminal::When you open a terminal emulator,by default are in the home directory of the logged in user.You will see the name of the logged in user followed by the hostname.

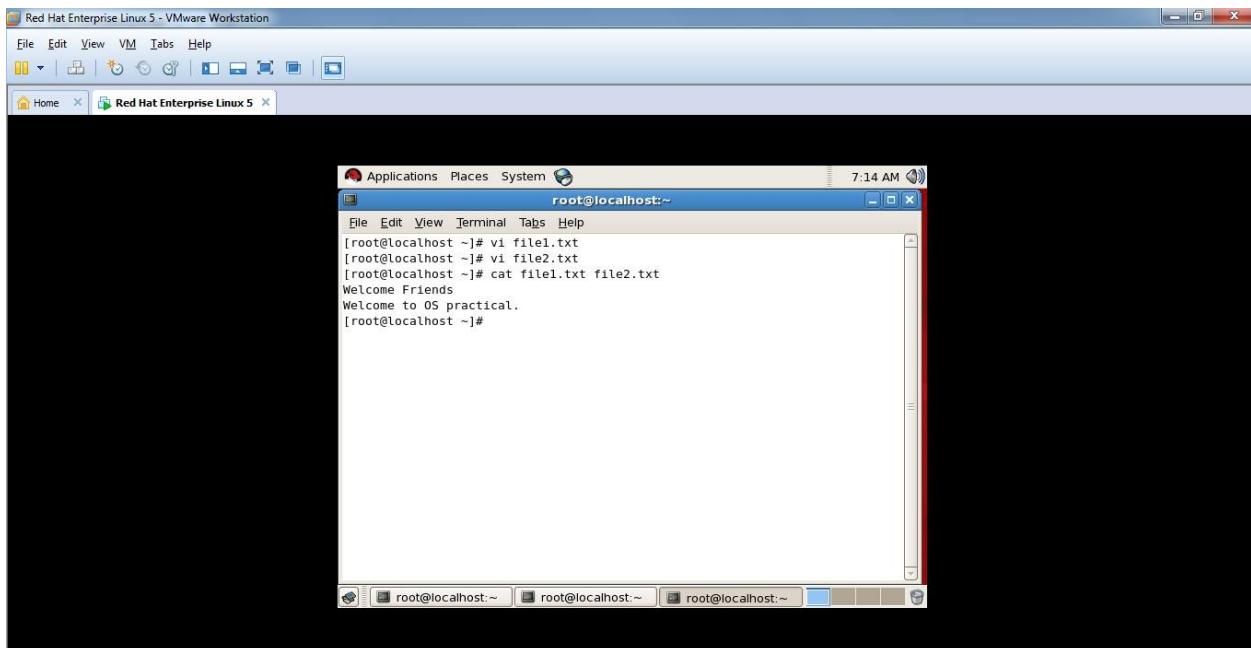












sys

