Objective: Run Few Basic Command in Linux

1 Connect to your VM by using putty then change the color to system color and font to 14.

- Connect to VM by using putty.

In (Figure 1) Firstly, I gave ***ip addr*** command in shell (REHEL 8) to check the ***ip address*** then I got some adaptor like ***emp0s3*** which is the network adaptor and got the ***ip address***.

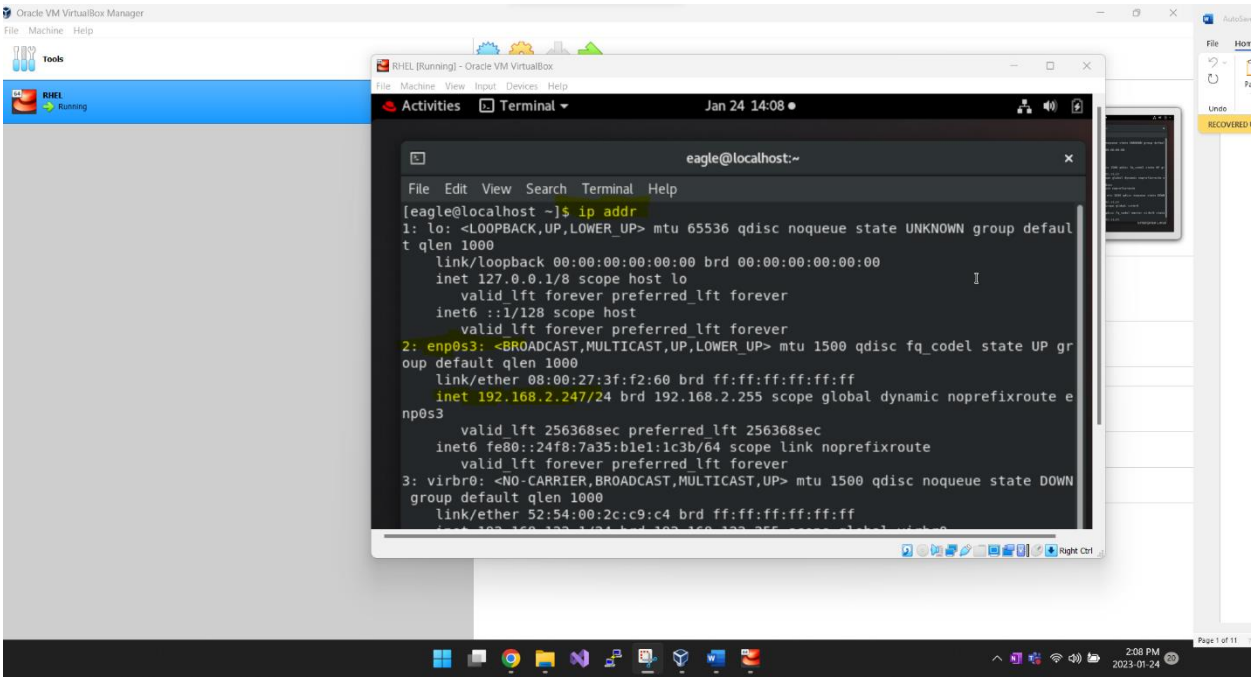

Figure 1 Connect to VM by using Putty.

In (Figure 2) Secondly, I quickly opened command prompt and gave a command with **ping and ip address**. After that I got replied from the virtual machine (VM).

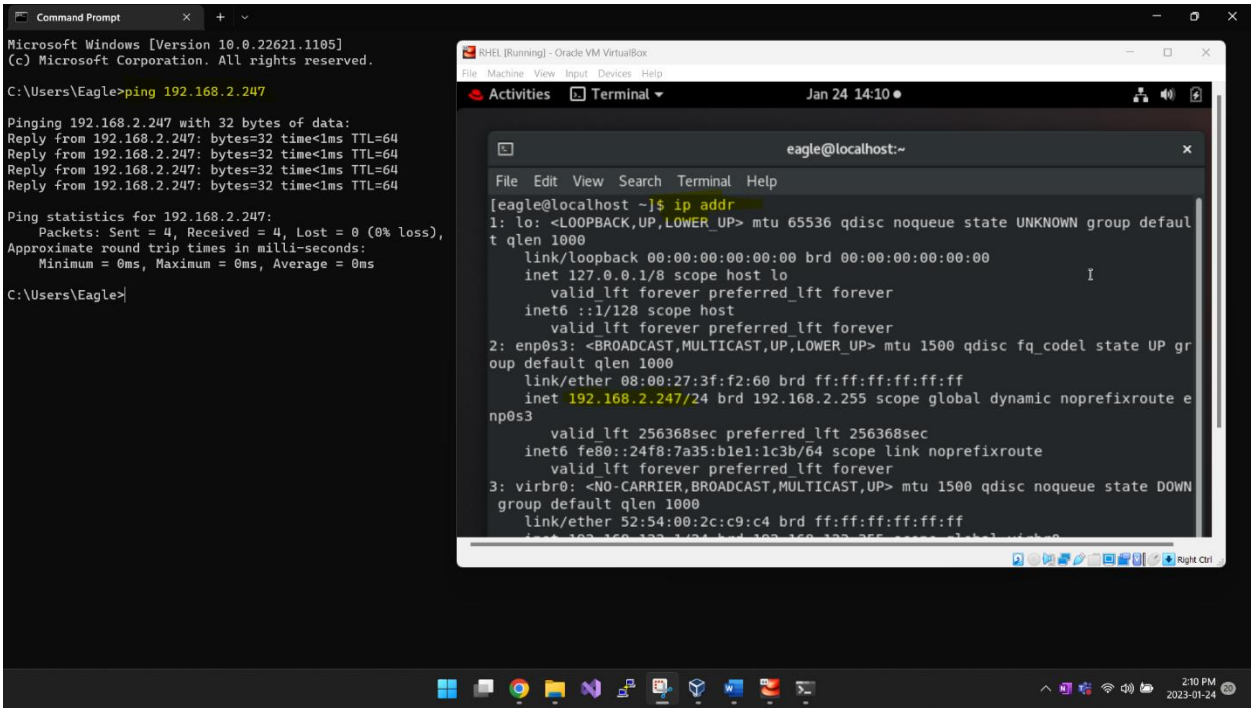

Figure 2 Command prompt (Window 11)

In (Figure 3) Thirdly, I opened putty and entered the ***ip address*** and got default port 22 for SSH then opened it.

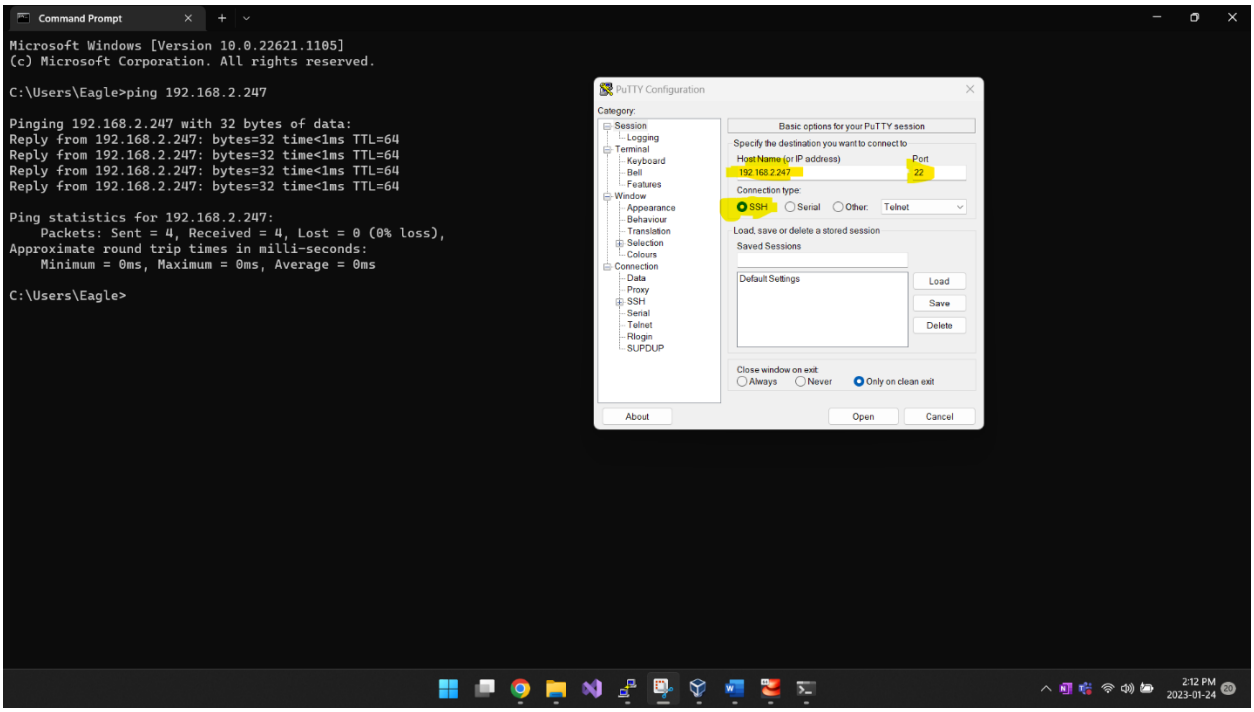

Figure (3) Open putty

Fourth, after opened I got login prompt and logged in with username and password.

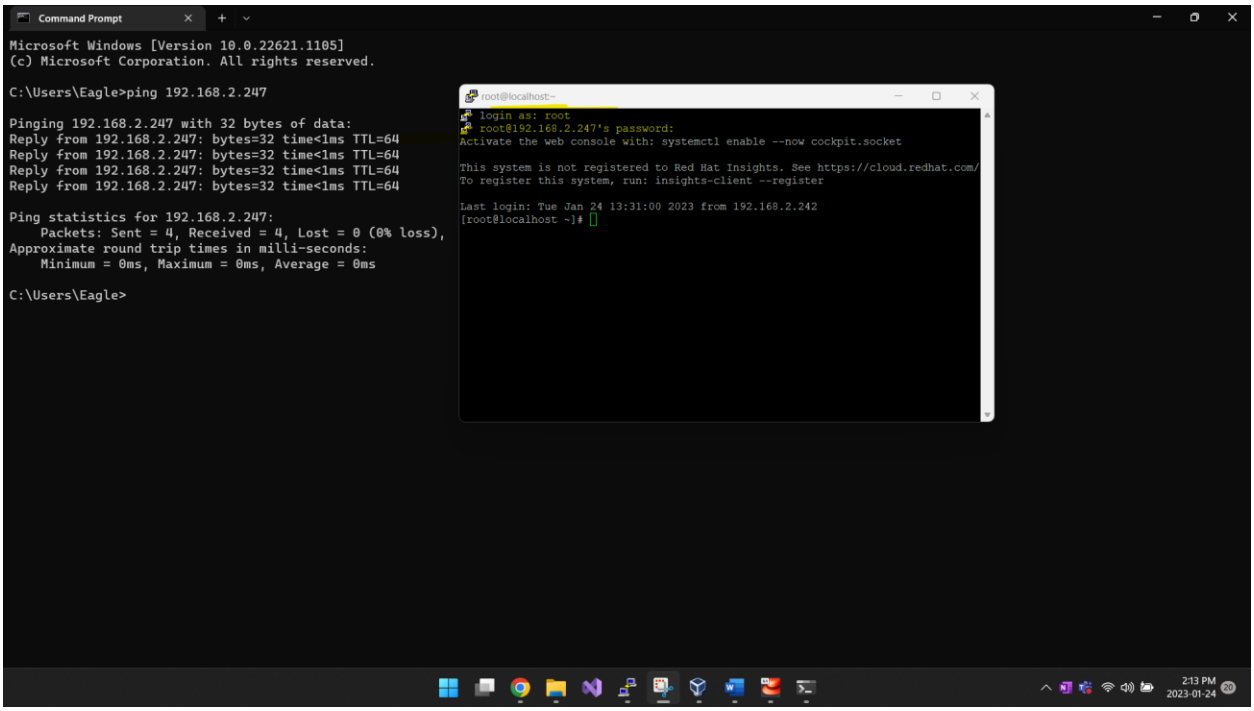

Figure (4) putty login with root user

In (Figure 5) At the end I have seen ***ip address*** with ***ip addr*** command and showed ***ip address*** of the same server which I was able to see the Linux console.

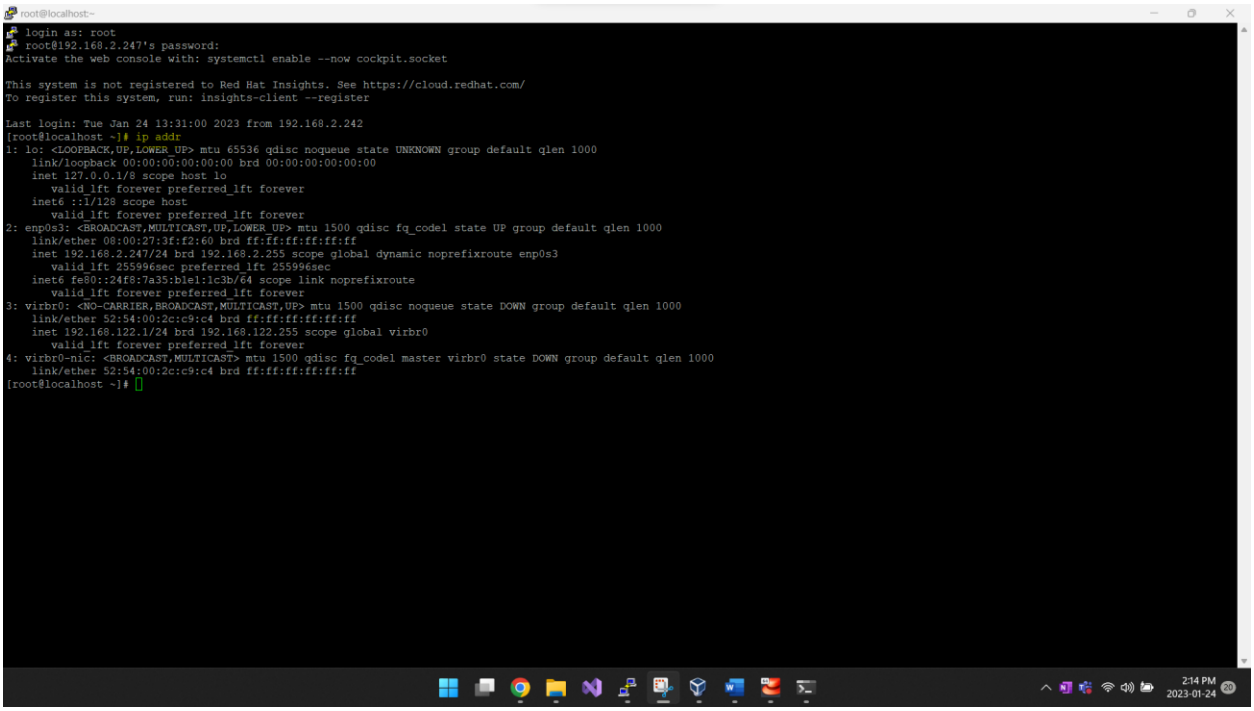

Figure (5) Login with root account and checked ip address.

➢ Change the color and font 14.

After login ***ip address*** and opened it, I went to left side, clicked on the icon, went to >change settings > colors > default background > the modified it and applied. (Figure 6)

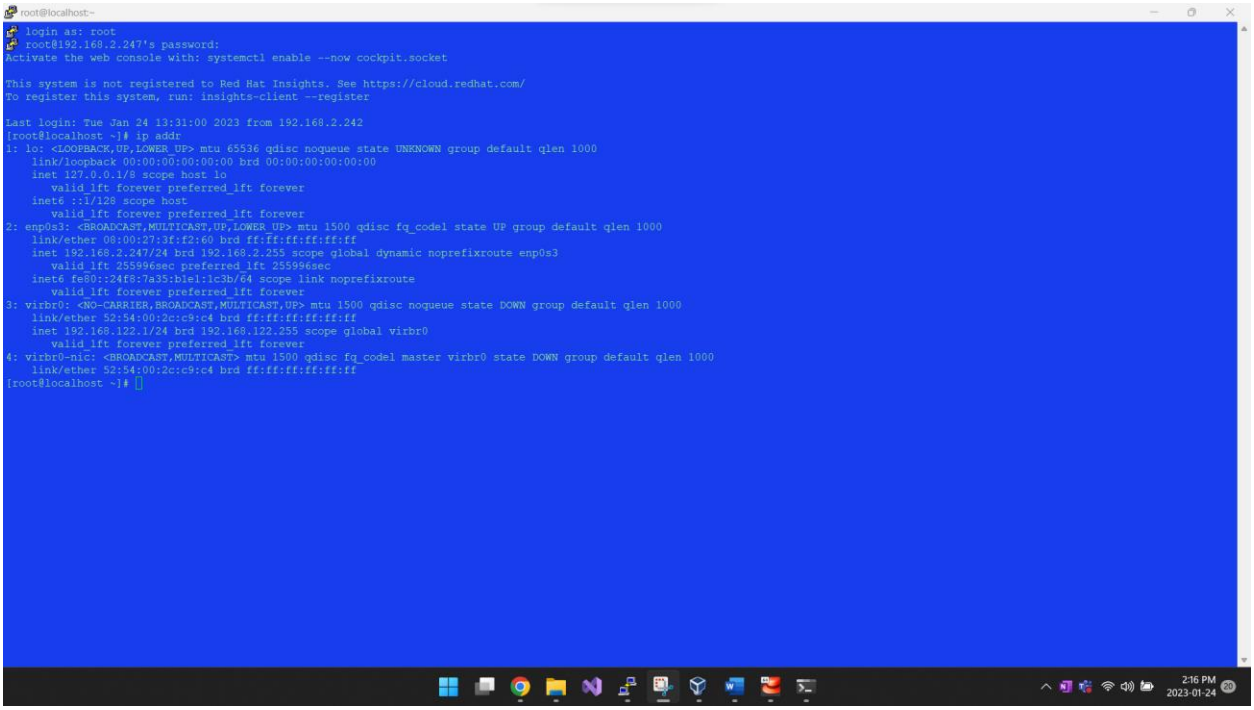

Figure (6) Change the color of putty's background.

Went to change settings > appearance >font used in the terminal now > change > font size 14 > okay then applied. (Figure 7)

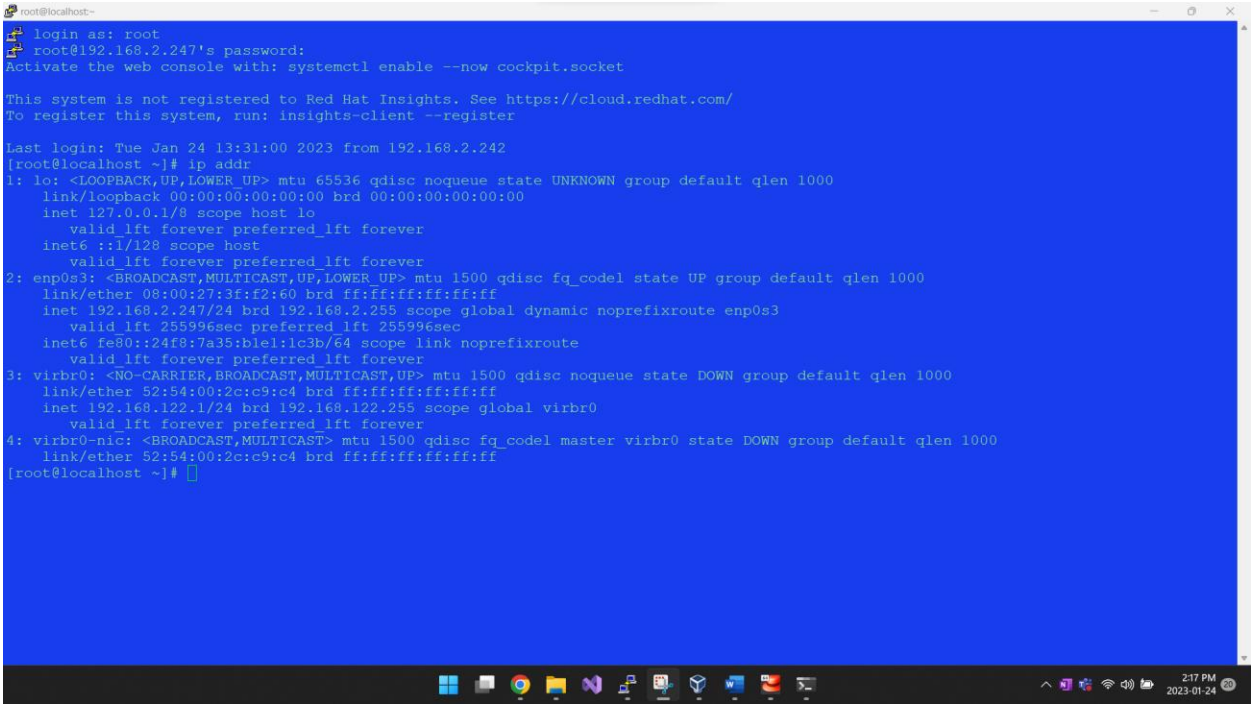

Figure (7) Font size 14

2 Demonstrate the following commands (run it in your VM) mkdir, touch, mv, cp, rm, ls, ll, ifconfig, scp

mkdir --- command which is used to create directory or multiple and subdirectory.

I used ***pwd (present work directory) command*** with the help of it I got that I am on slash board and created a folder.

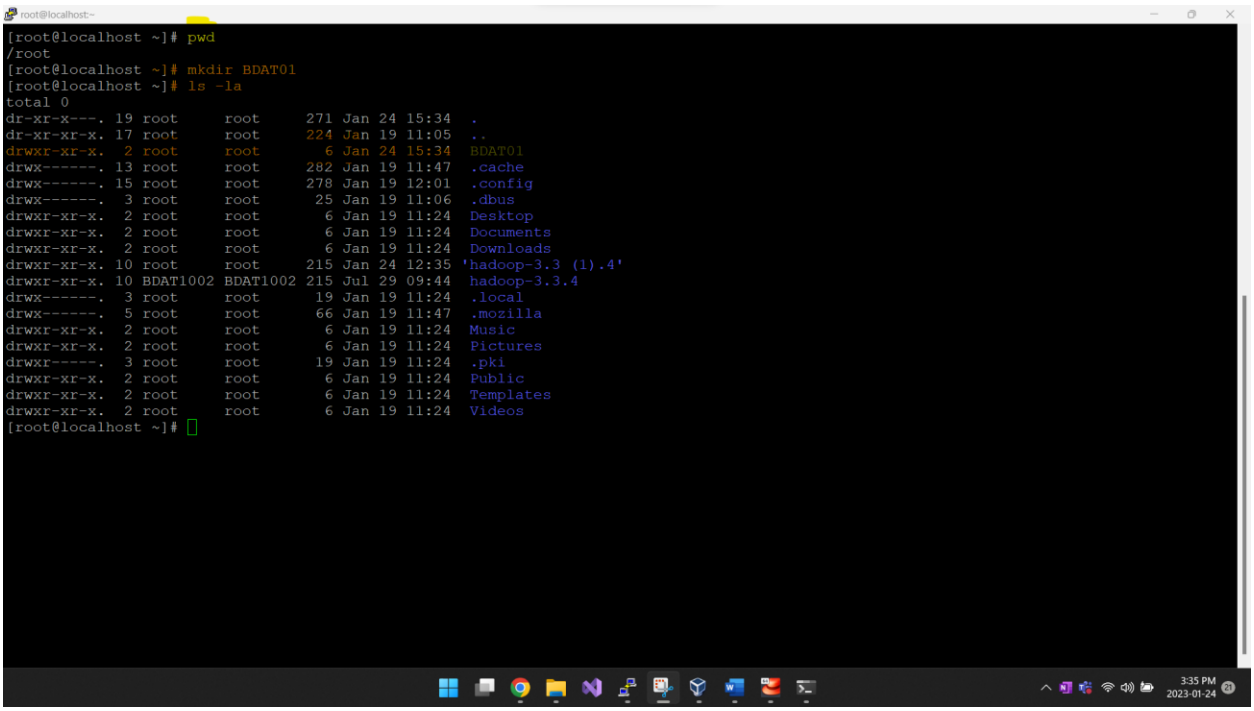

Figure (8) pwd command and mkdir command

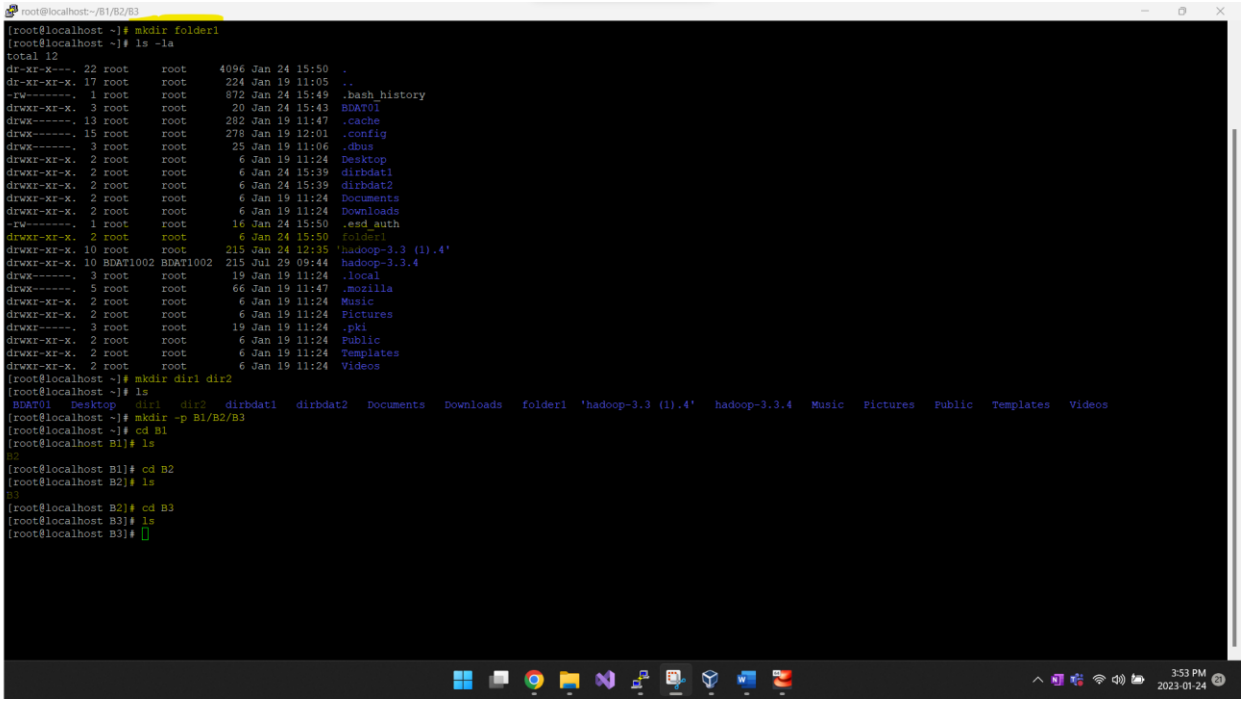

Figure (9) mkdir command for directory or subdirectory

- ***Touch, mv, cp, rm, ls commands***

In the below figure where I run all commands, firstly, I made a new file with ***vi command*** and gave name BIGDATA. In next step I went to ipdocuments folder where I made a new folder while using directory (folder01) and transferred BIGDATA file into documents further used ***ls command*** where I got that in document folder, I have folder01 file. So having something in this folder I used ***cp*** (copy) command **cp /home/eagle/Documents/BIGDATA /home/eagle/Documents/folder01** in this bold line **I us**ed copy then I was on home/eagle page so copied BIGDATA file and gone into folder01. Moreover, I similarly, used mv (move) command to move my file into folder01. At the end used ***rm command*** to remove the file.

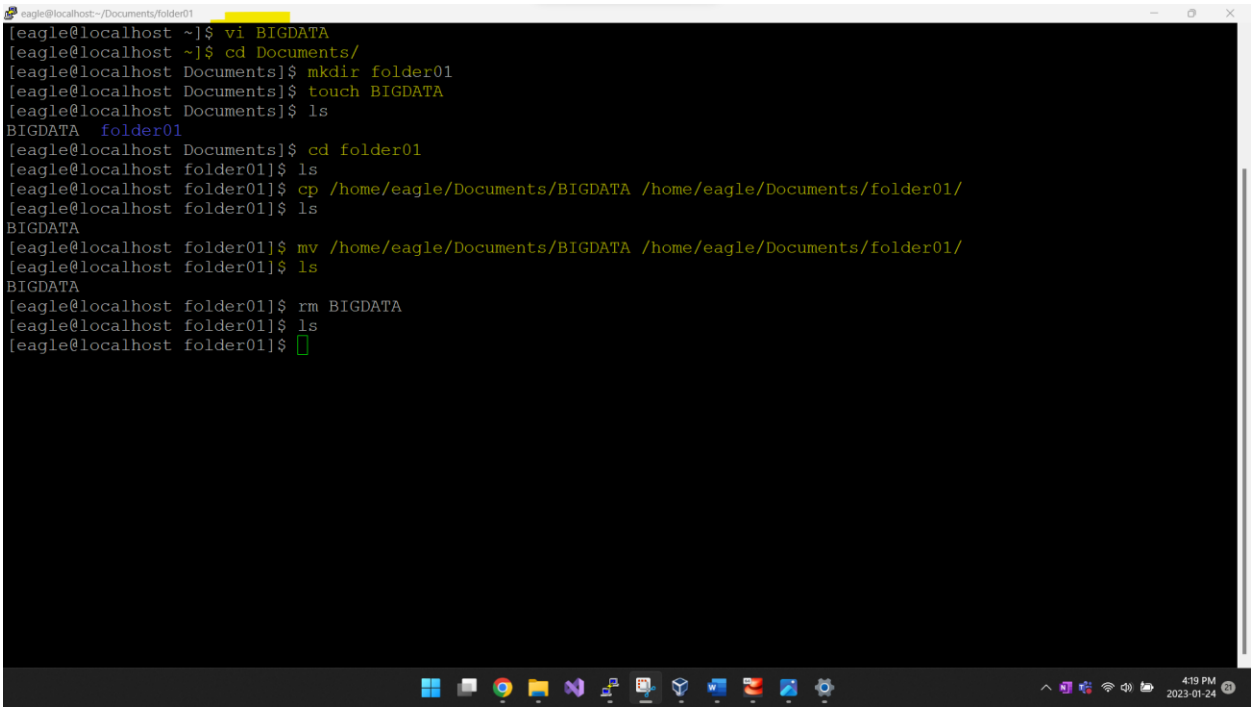

Figure (10) used cp, mv, ls,

- ***ll command***--- I used ***ll command*** in root login to see the file along with the permission, date, time and size.

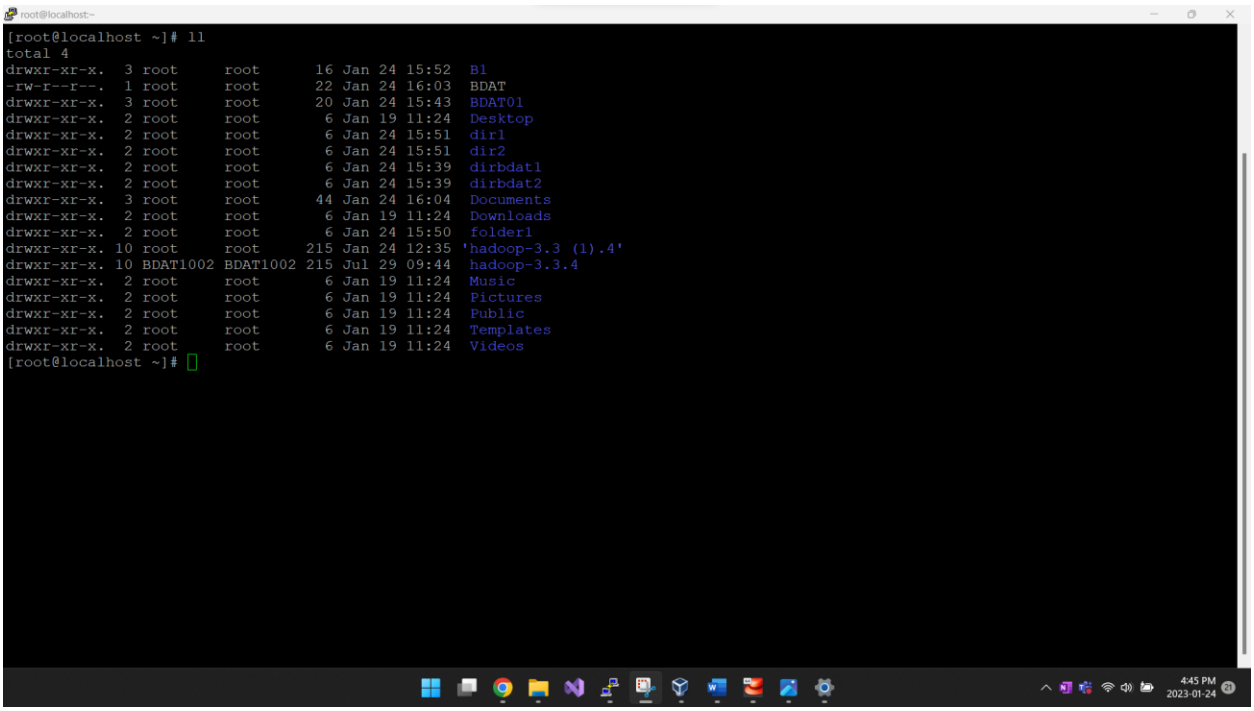

Figure (11) ll command

In figure12 I used ***Ifconfig command*** to check the assigned ***ip address*** of the server.

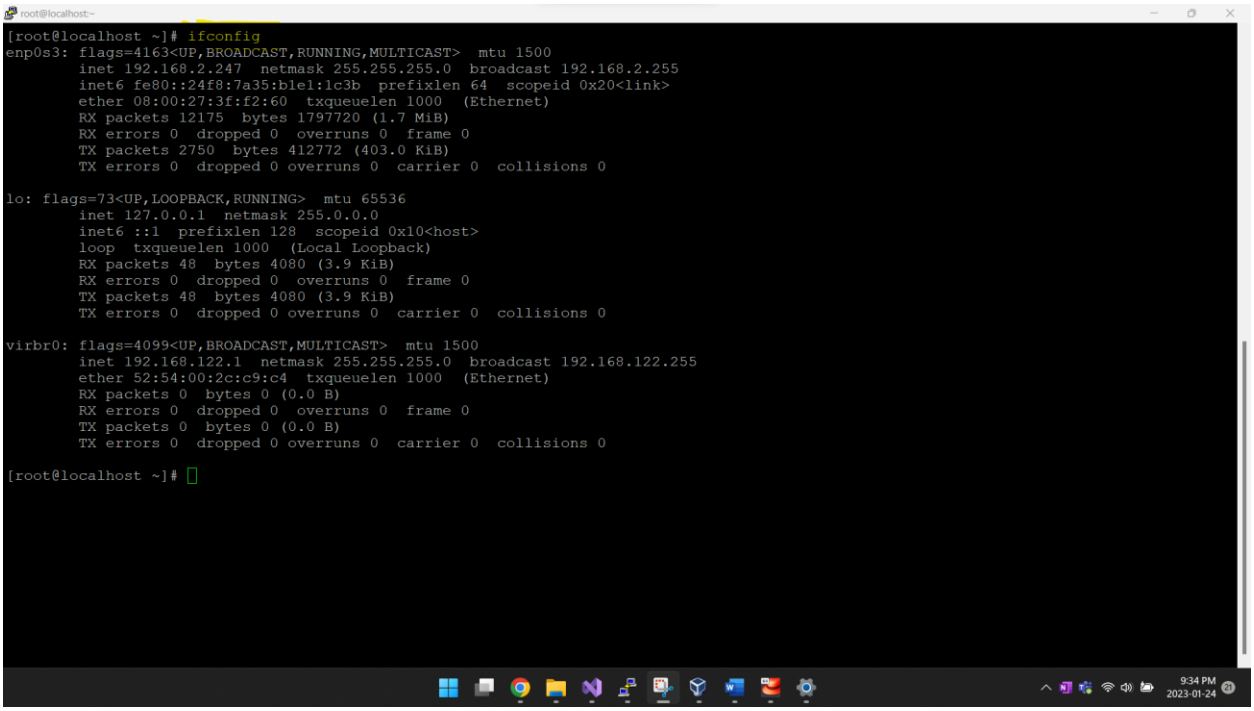

Figure (12) ifconfig command

- **SCP Command:**

Firstly, I just copied the file from my local user.

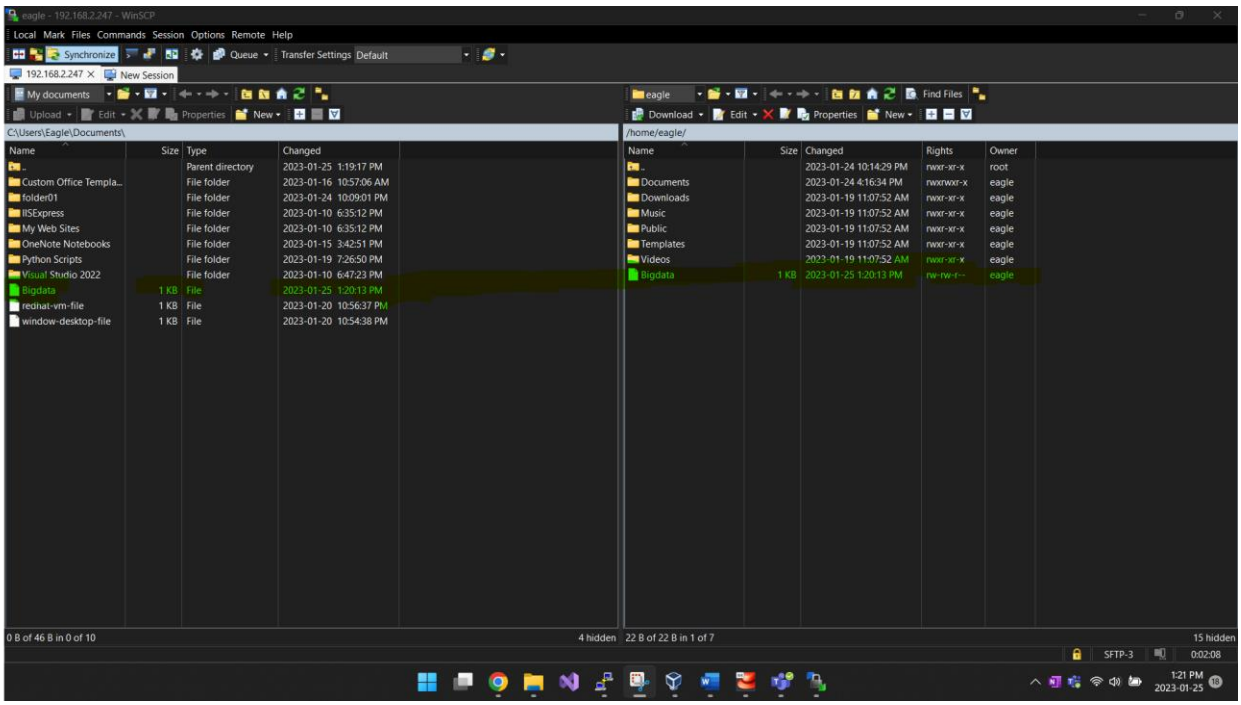

Figure (13) Copied file from local file

I ran ls, pwd, command to check where I have to move my file (figure 14)

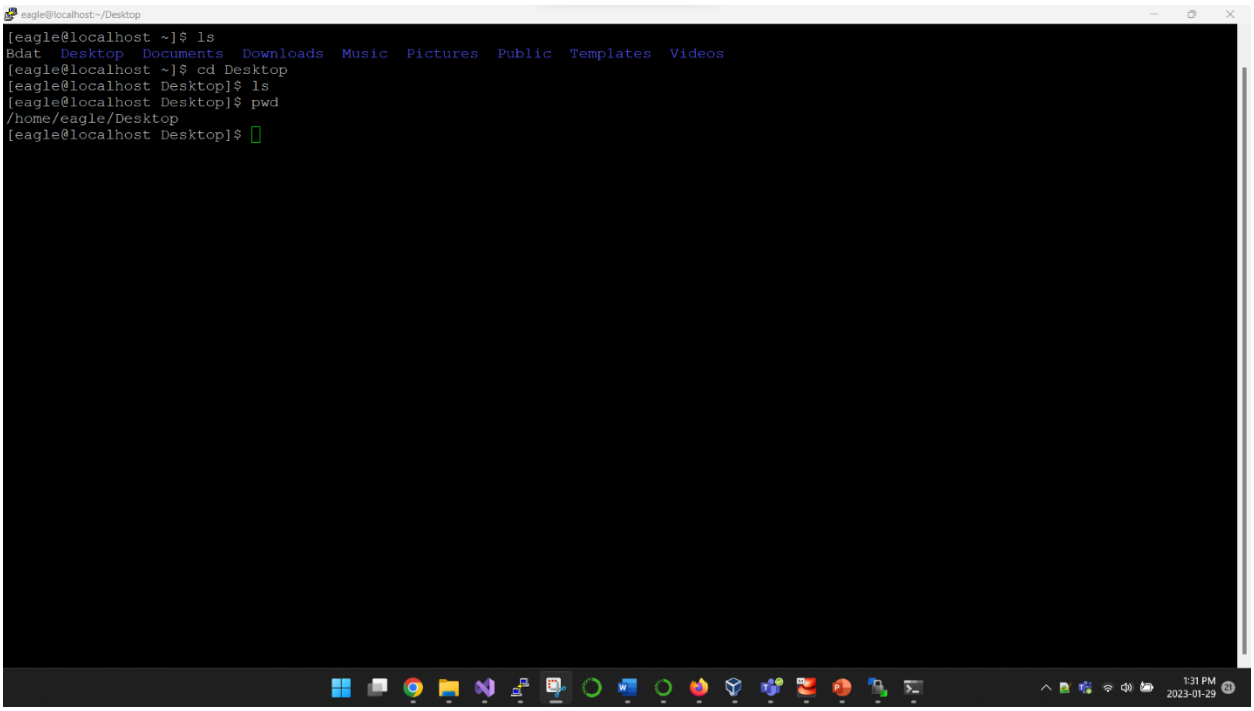

Figure (14) Used pwd command to get where is my user

I opened terminal of my window 11, where I used scp command and paste my file link, gave my user name along with ip address and gave command where I have to paste it (Figure 15).

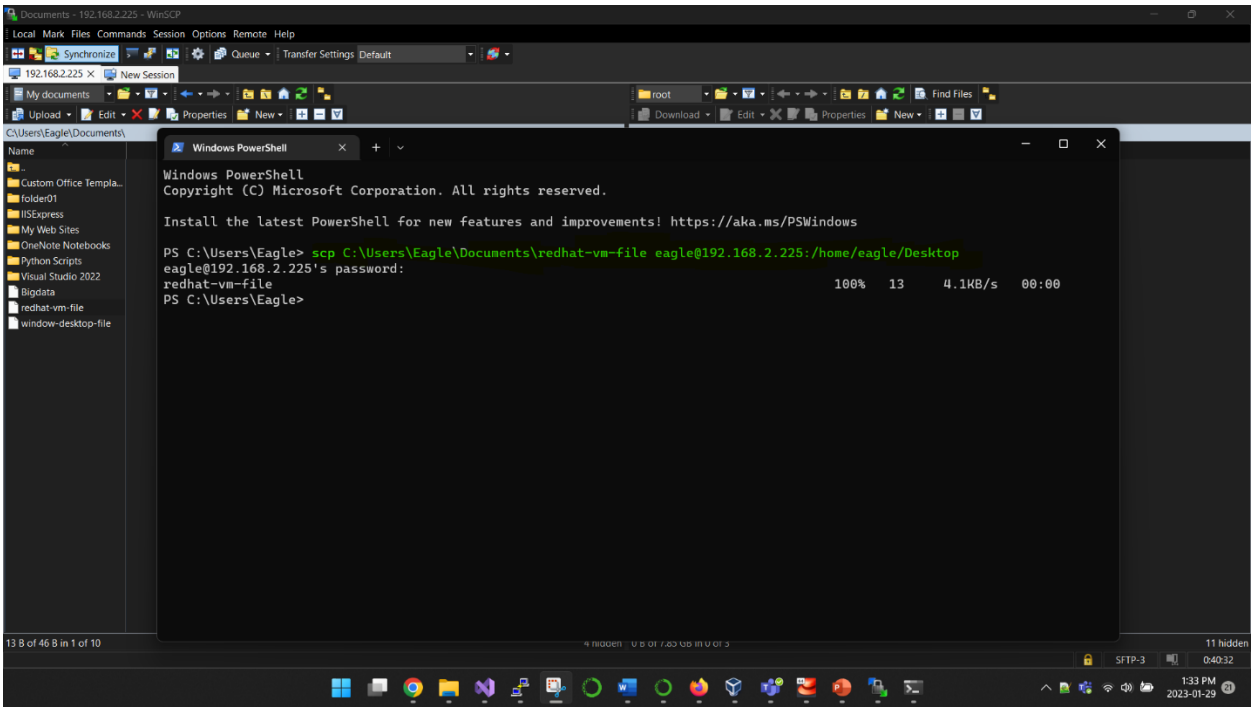

Figure (15) Used scp command

I showed in below figure I got my file on /home/eagle/Desktop. File name is redhat-vm- file (Figure 16).

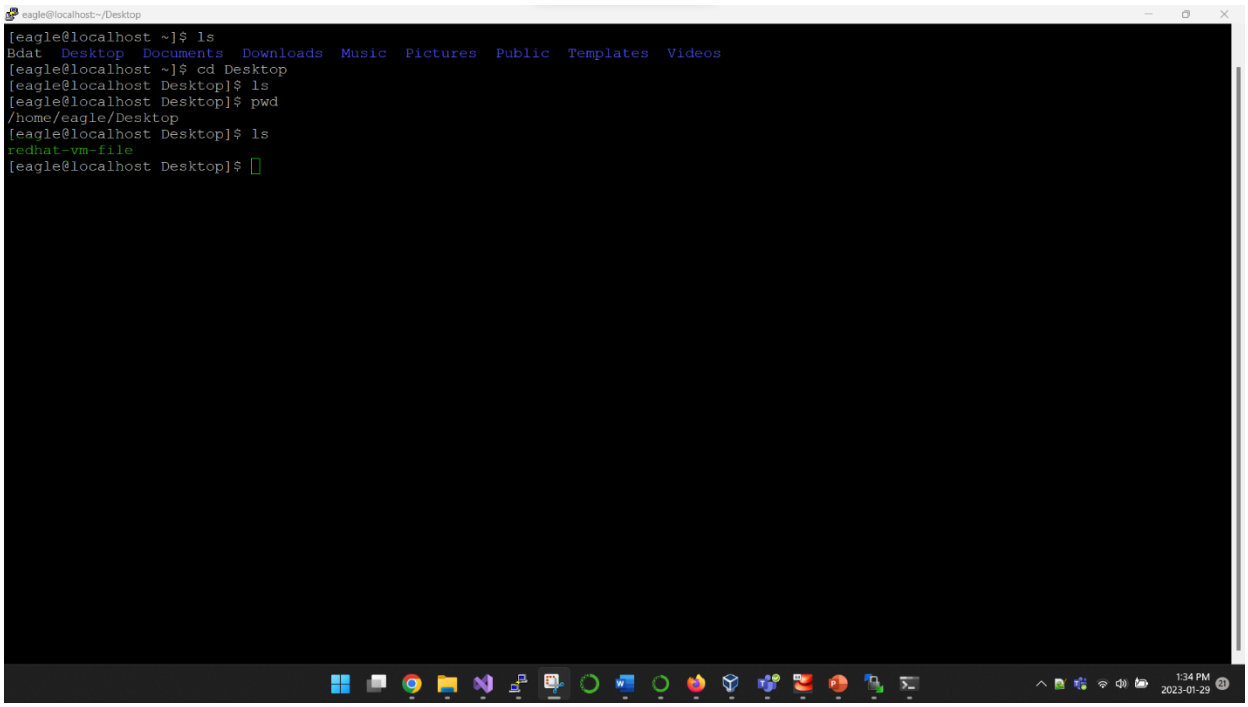

Figure (16) File from local to vm user

3 Create a file by using vi and put some contents in it like “hello group x” x is your group number. Verify it by using cat command to show the content.

I went on shell and gave ***vi command*** to create a new file. I created Bigdataanalytic file where I wrote some content inside this file. After that to come back from last shell, I used esc key and put sign of colon and gave ***wq command*** to get out from the shell. Finally, I gave cat command to show the content what I have written (Figure 17).

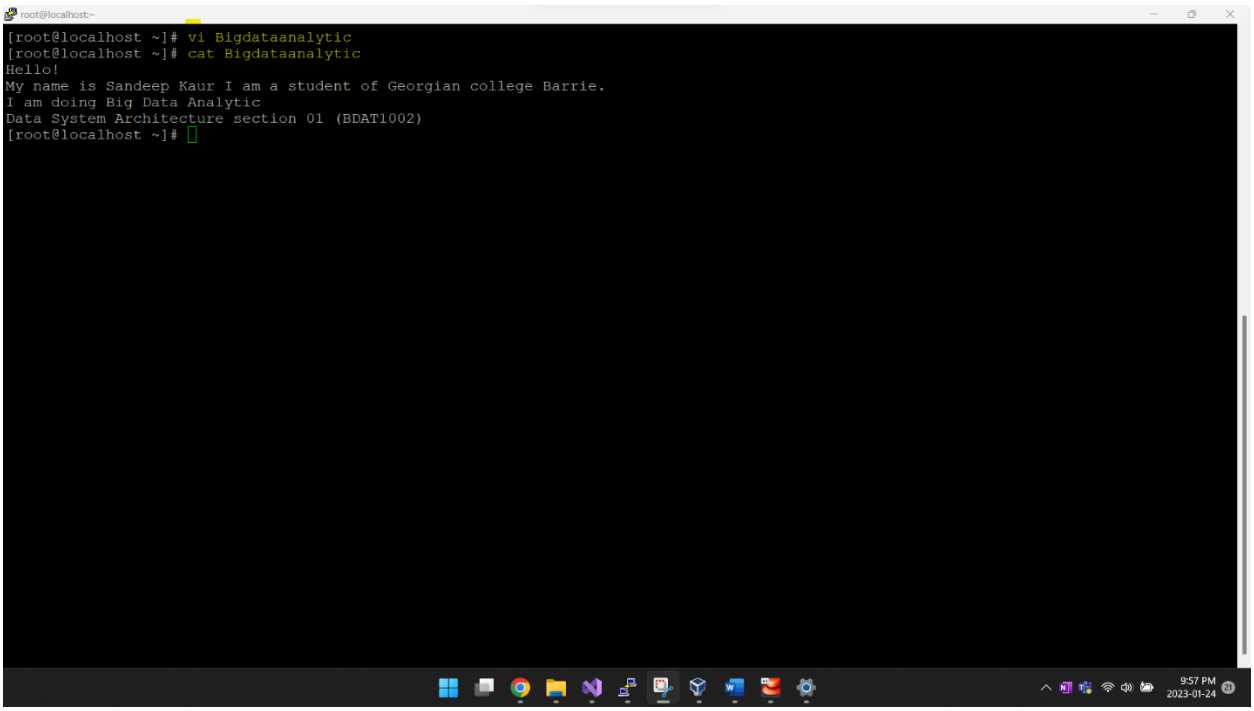

Figure (17) vi command and cat command

4 Use WinSCP to transfer a file to your Linux VM.

I downloaded WinSCP after that I used ***ip address*** to attach with VM Linux. I made a file name of Bigdata and wrote some content. After doing all I dragged the file from local to Linux VM by using WinSCP (Figure 18).

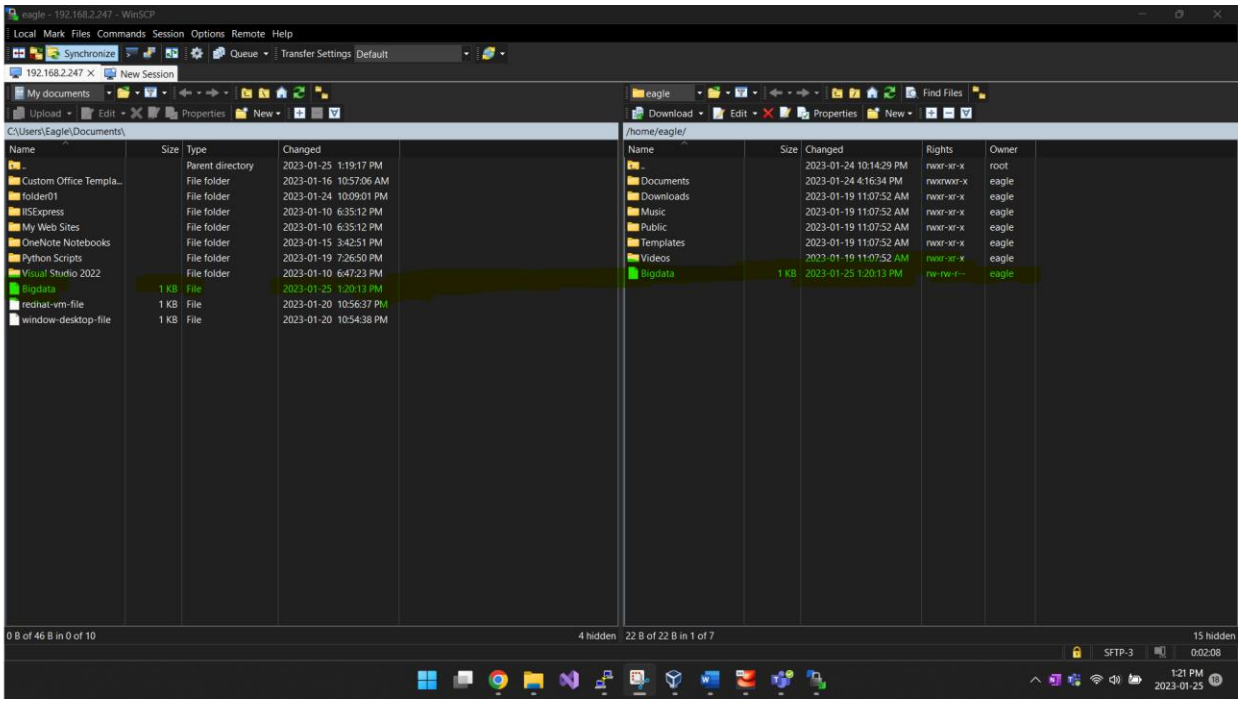

Figure (18) Sent file from WinSCP to Linux VM

5 Create a user with password then log in with new username by using sudo.

In this figure (Figure) firstly I added a user the name of the BigData then set a password then I used ***sudo command*** to add a new user and gave a same password and logined in with that user (sec1) by using Sudo command.

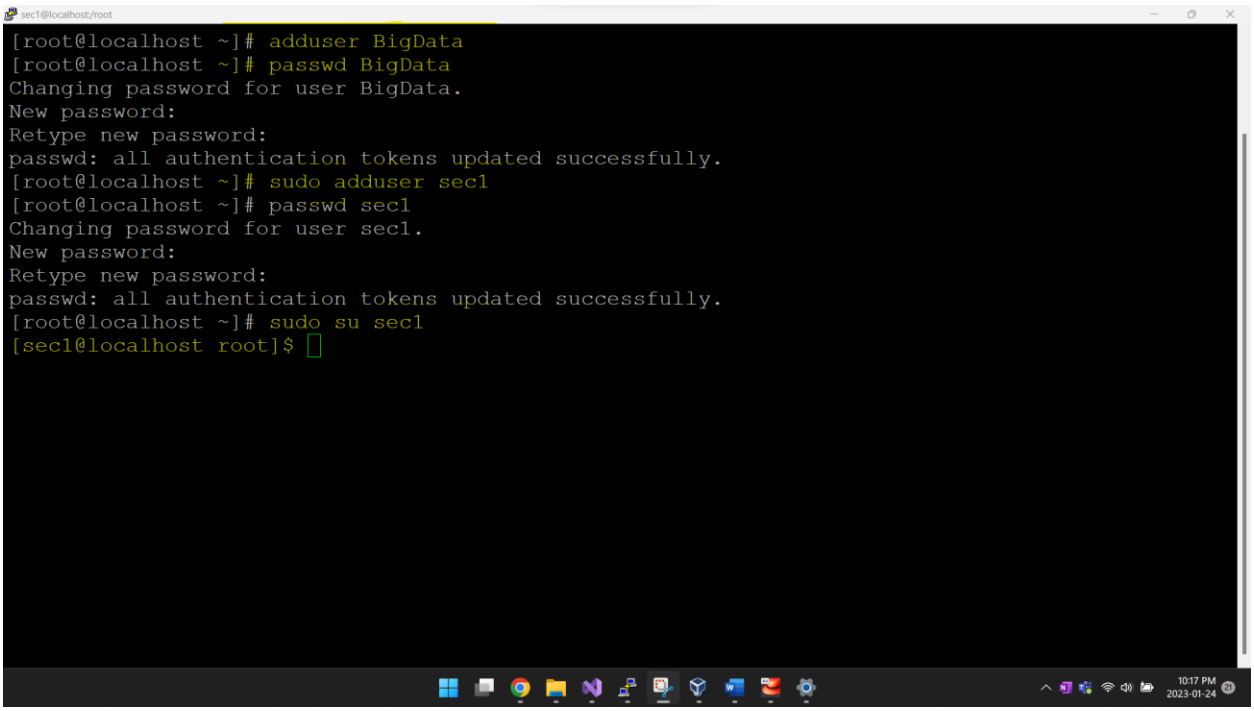

Figure *19* sudo command

6 Create a file then modify the permision to full permission.

Well in this figure I created a new file by using ***vi command*** then to check my file I used ls command after that I used ***ls -la command*** to check the permission where I got to permission only read and write (Figure 20).

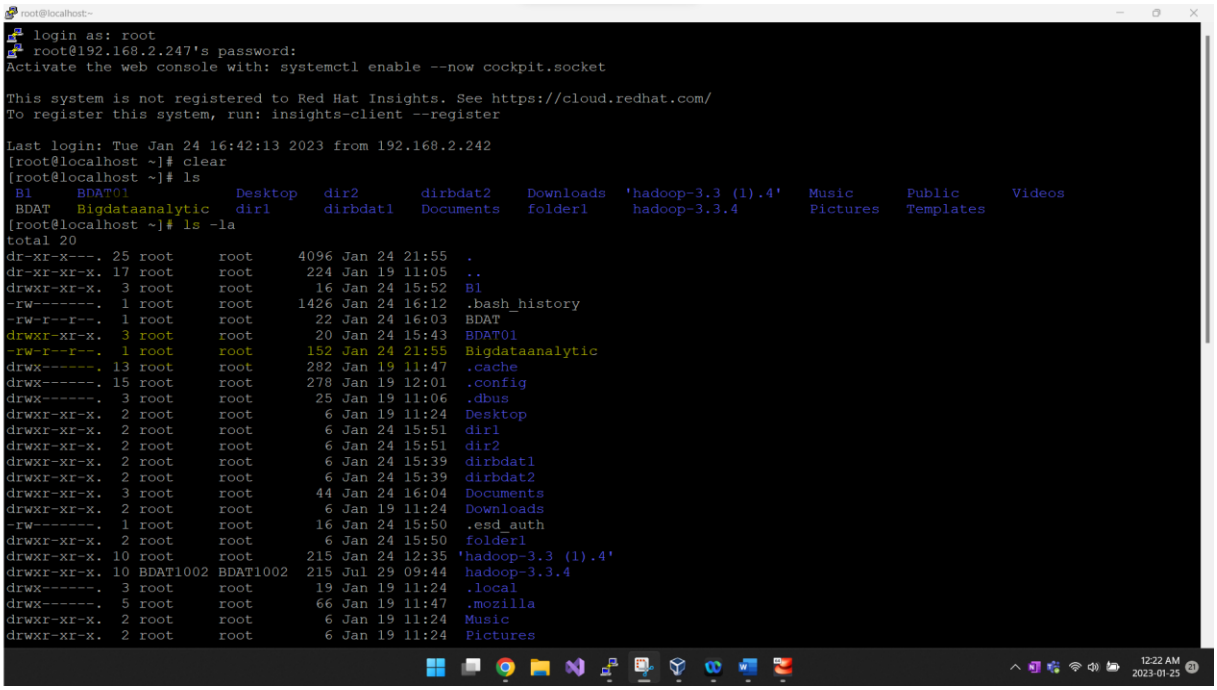

Figure 20 created file which have only permission of read and write

I used ***chmod command*** to give full permission after having this command I got full permisison for Bigdataanalytic, read, write and execute.

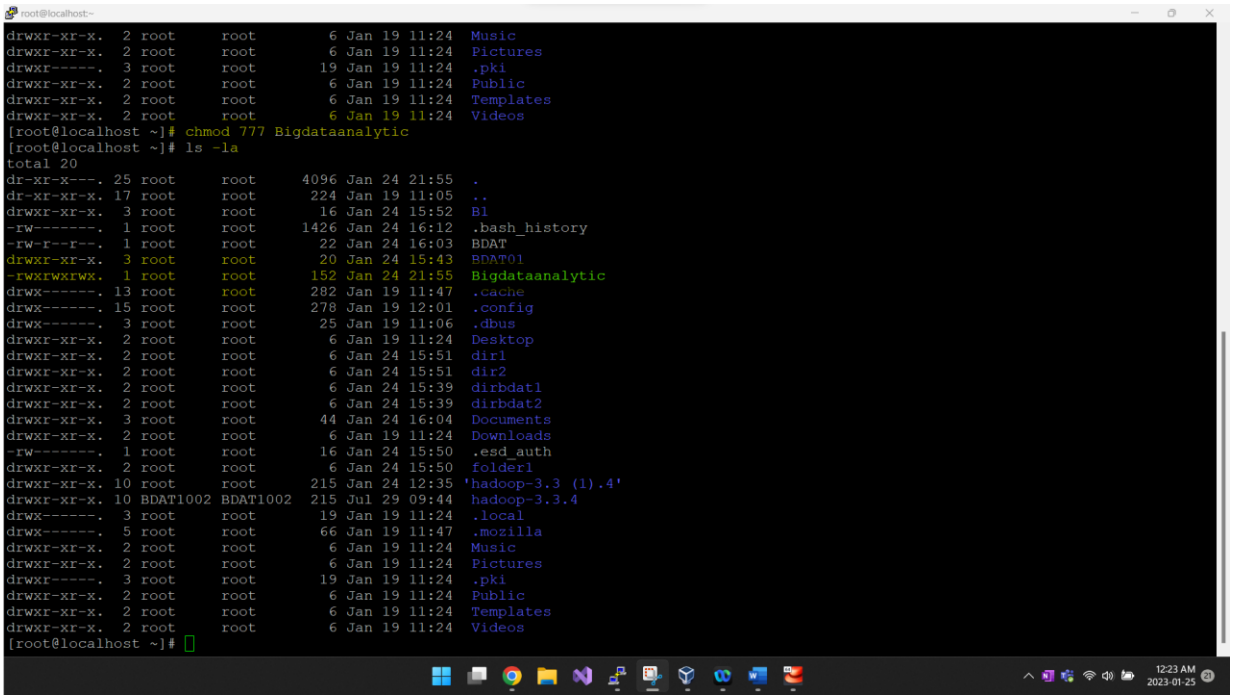

Figure *21* Bigdataanalytic file which have full permission to read,write and execute by using chmod command

7 Download Hadoop by using wget then unzip it (any Hadoop version is fine)

Firstly, I installed ***wget*** to download Hadoop. I downloaded this Hadoop version hadoop3.3 by using ***wget*** after download I used ***tar xvf*** {file name} to unzip it.

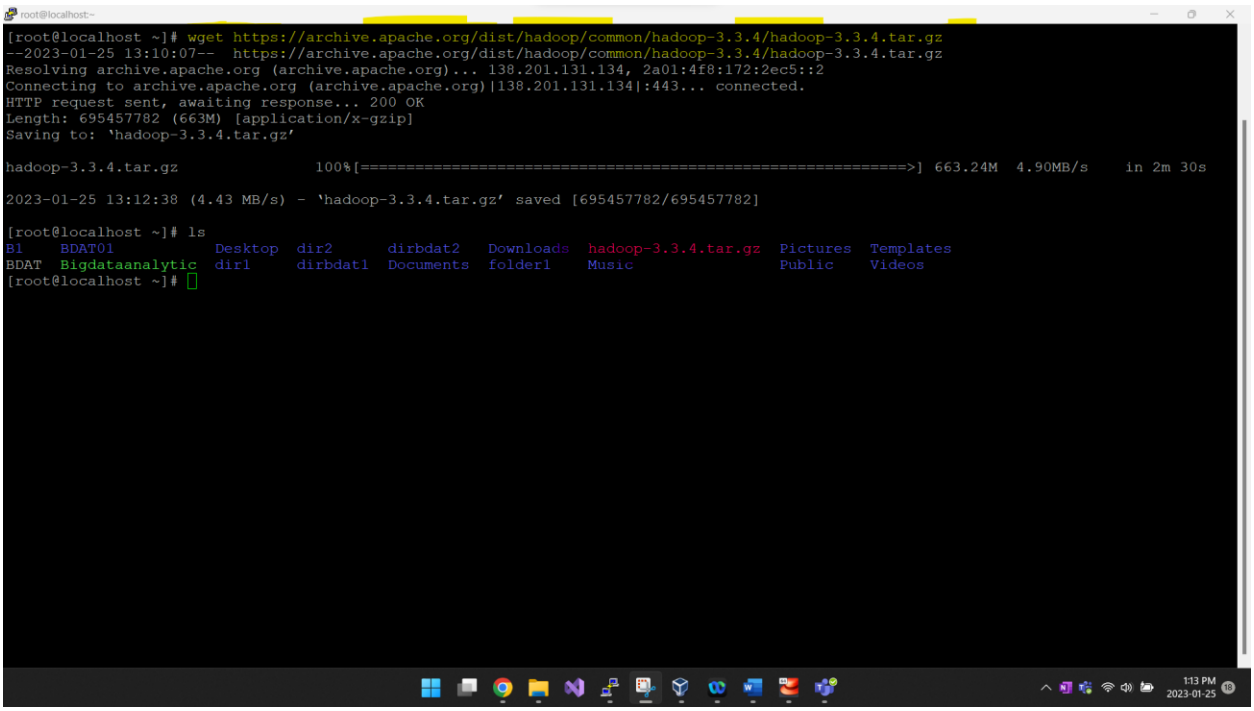

Figure 22 Hadoop downloaded by using Wget

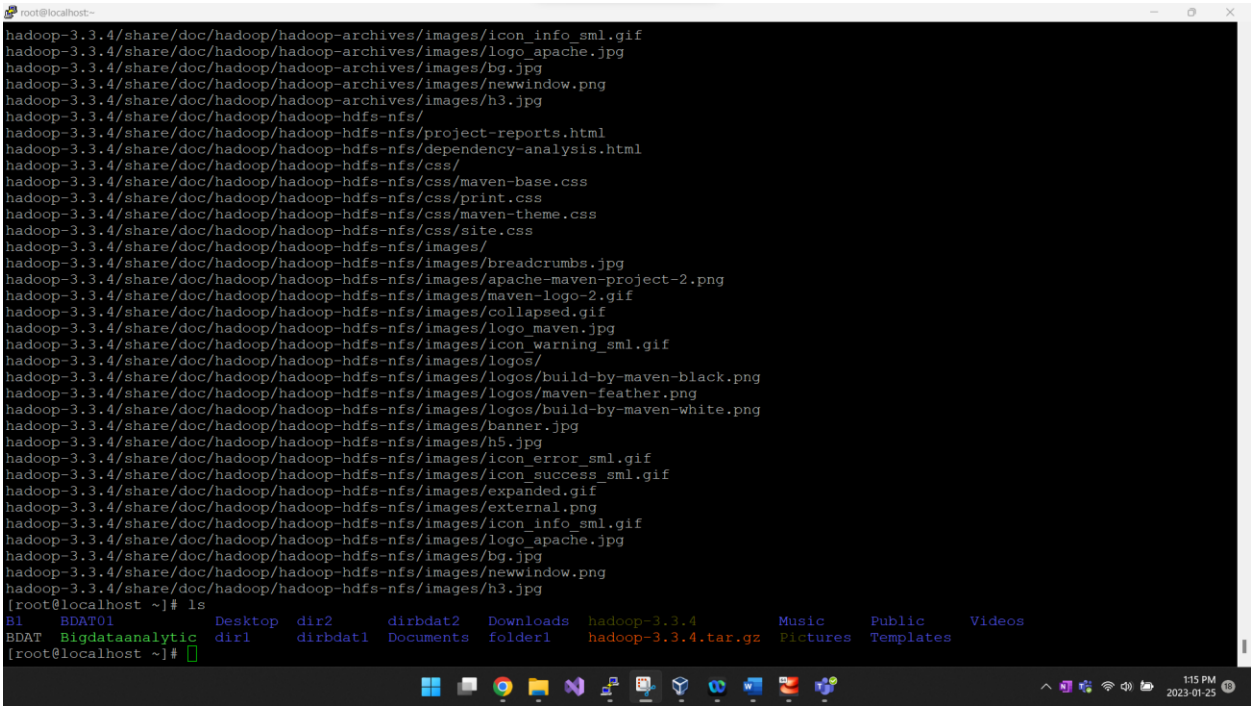

Figure 23 Unzip Hadoop

8 Install any package (like http) then remove it.

Installing package, I used yum install command such as yum install -y {package name} (figure 21)
And to remove this package I used yum remove {package name} (figure 22)

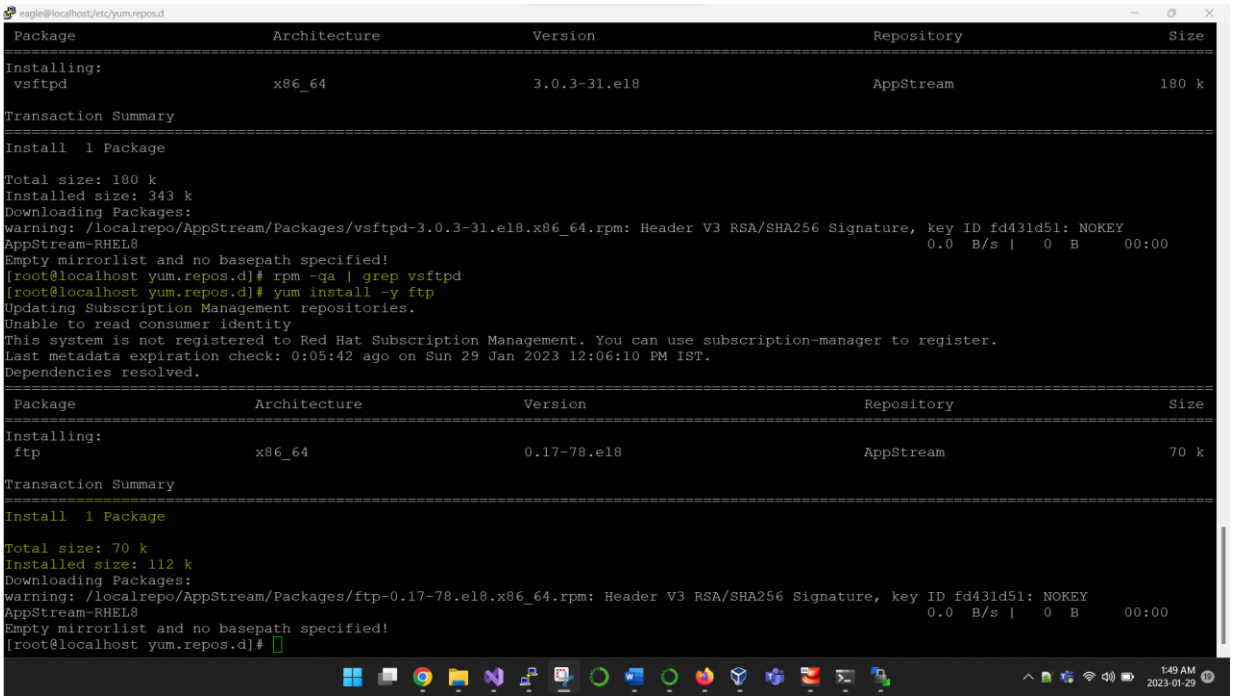

Figure 24 Packages of ftp

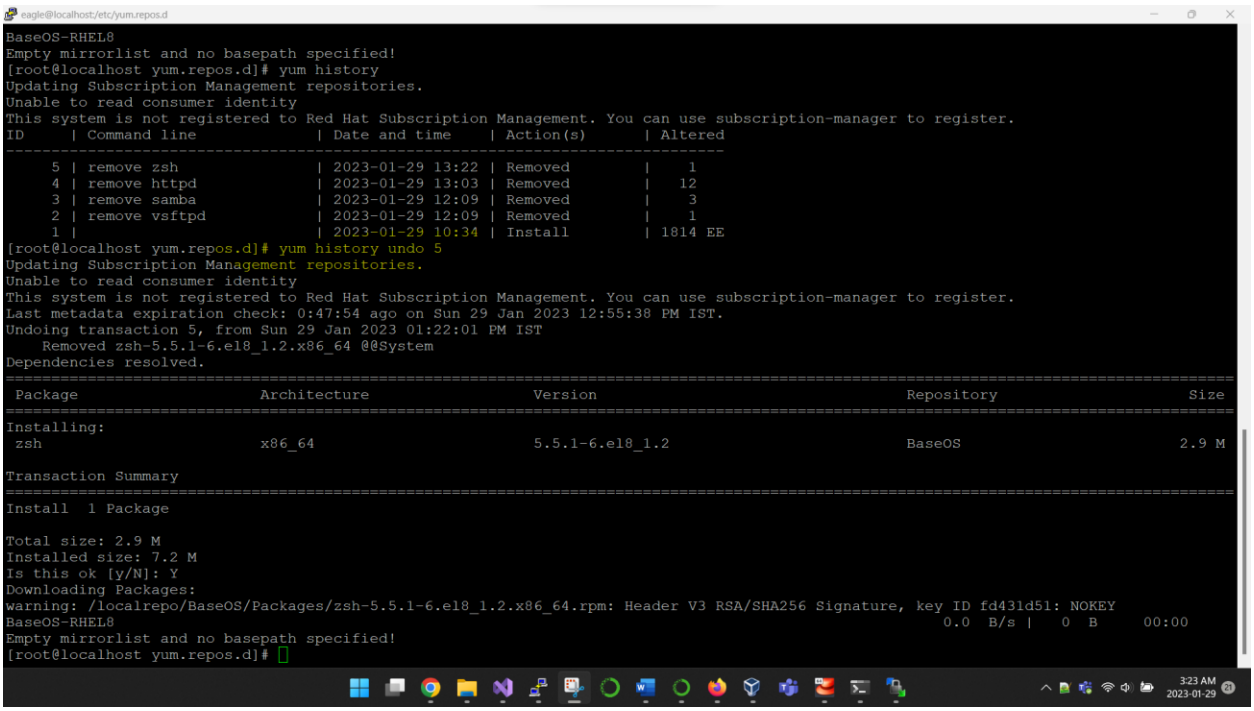

Figure 25 Remove package of ftp

9 Create your local.repo and make sure its working. If already has been set up just show it. Explain why it's used.

Firstly, I made a directory of localrepo on the root user after that I just mounted it in iso image. I gave df -hT command to check my file is mounted or not. I found that repository files under etc/yum.repos.d . I made here local repo with (.)repo

extension, I wrote content such as I gave name and gave ***metadata_expire*** which will expire metadata after expiring because I set here then I used gpgcheck for having authentication, in other words to check package while enabling it. I enabled this repository and I gave path to install repos for example file:///localrepo/BaseOS/ and gave key to check ***gpg file///etc/pki/rpm-gpg/RPM-GPG-KEY-redhat-release***. At the end I showed content which I have written in ***local.repo*** file. The uses of local repo to install software package and updates. As it is free network. (Figure 21) I installed one packages which I showed above in (figure 25)

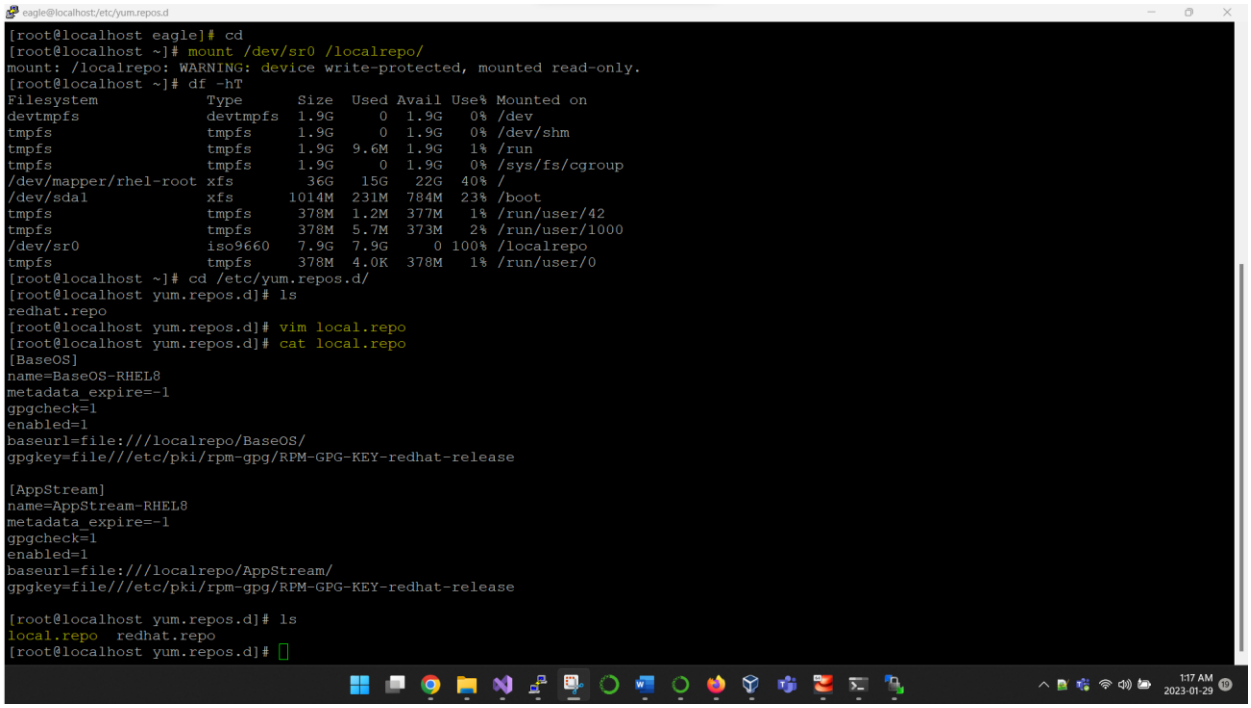

Figure 26 local.repo file

10 From the command line upgrade your VM to GUI.

Certainty, I used ***putty*** to run command ***systemctl isolate multi-user.target*** switch to CLI to GUI and GUI to CLI.

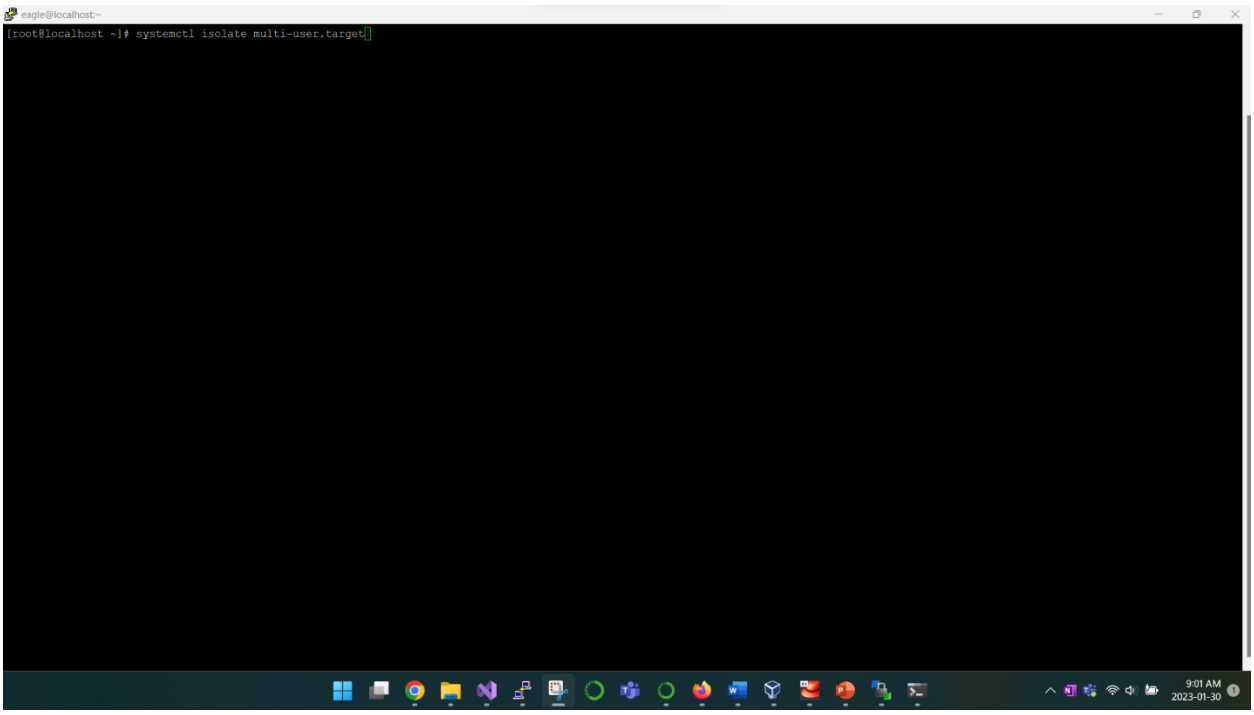

Figure 27 switch VM to GUI

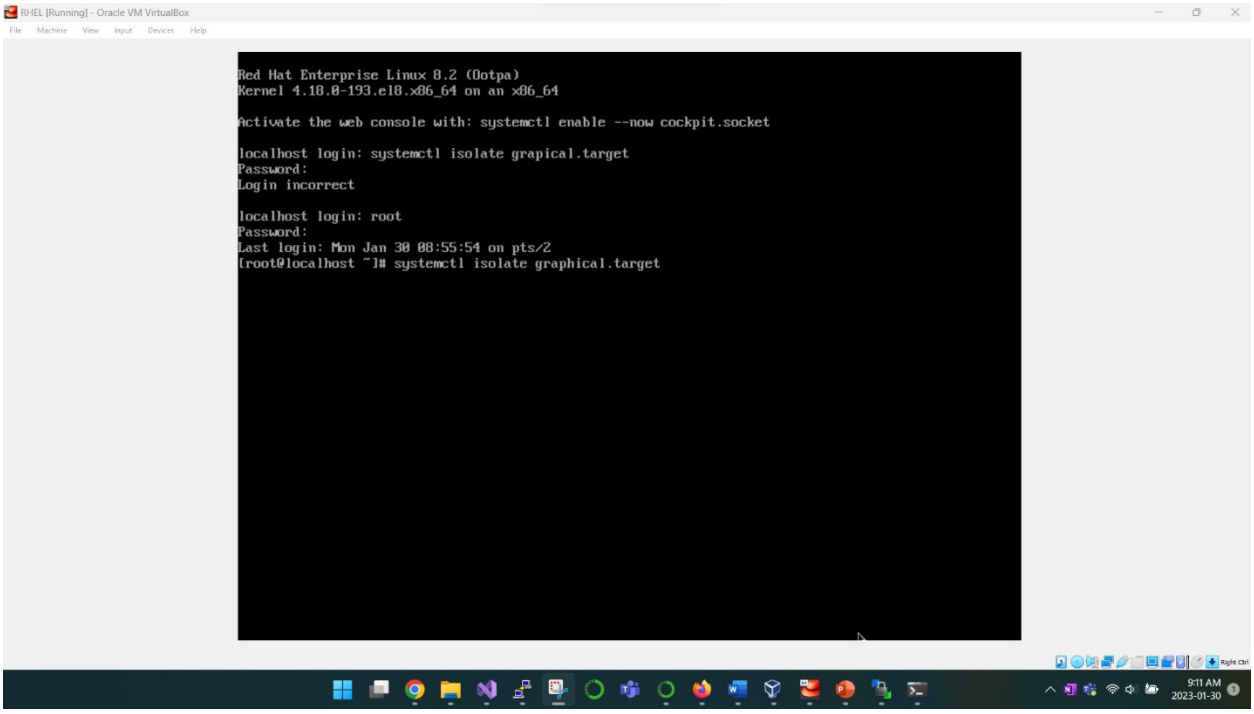

Figure 28 Switch GUI to VM