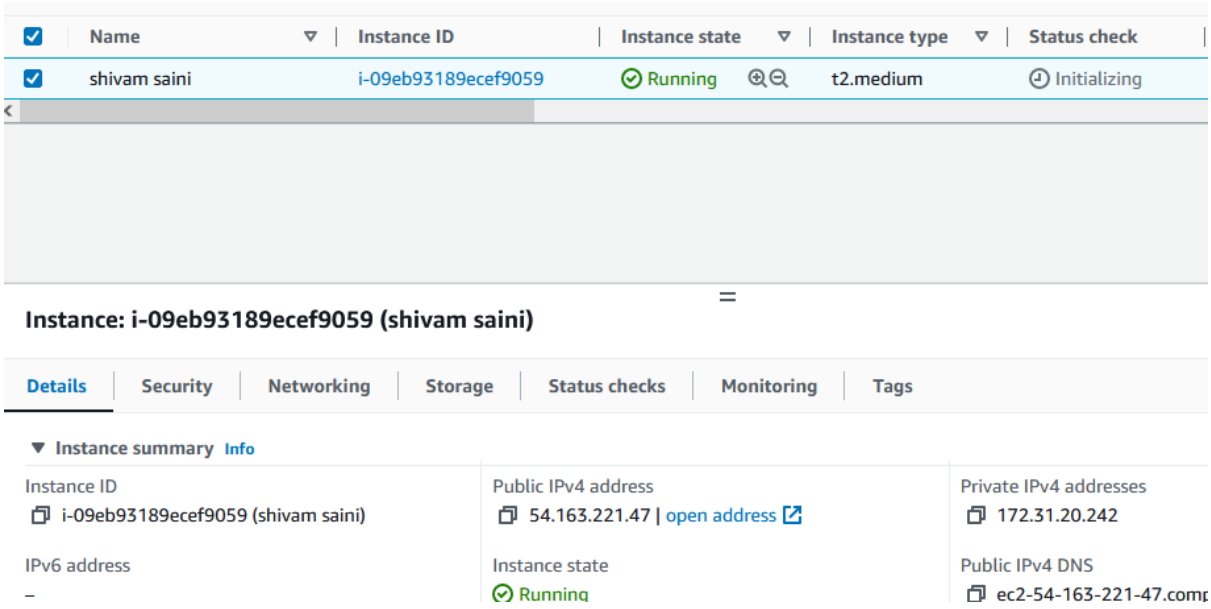
Launch ec2-instance of RHEL9 in GUI

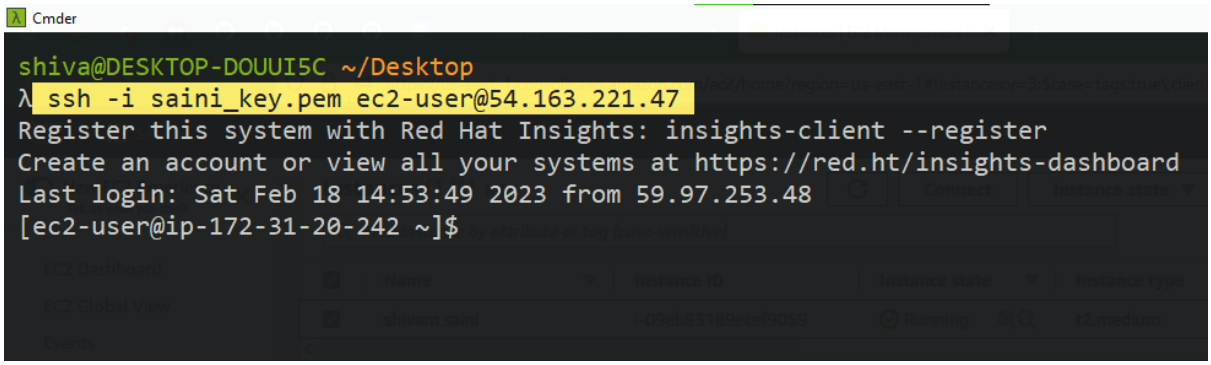
First open our AWS account:

Launch RHEL9 Instance ::

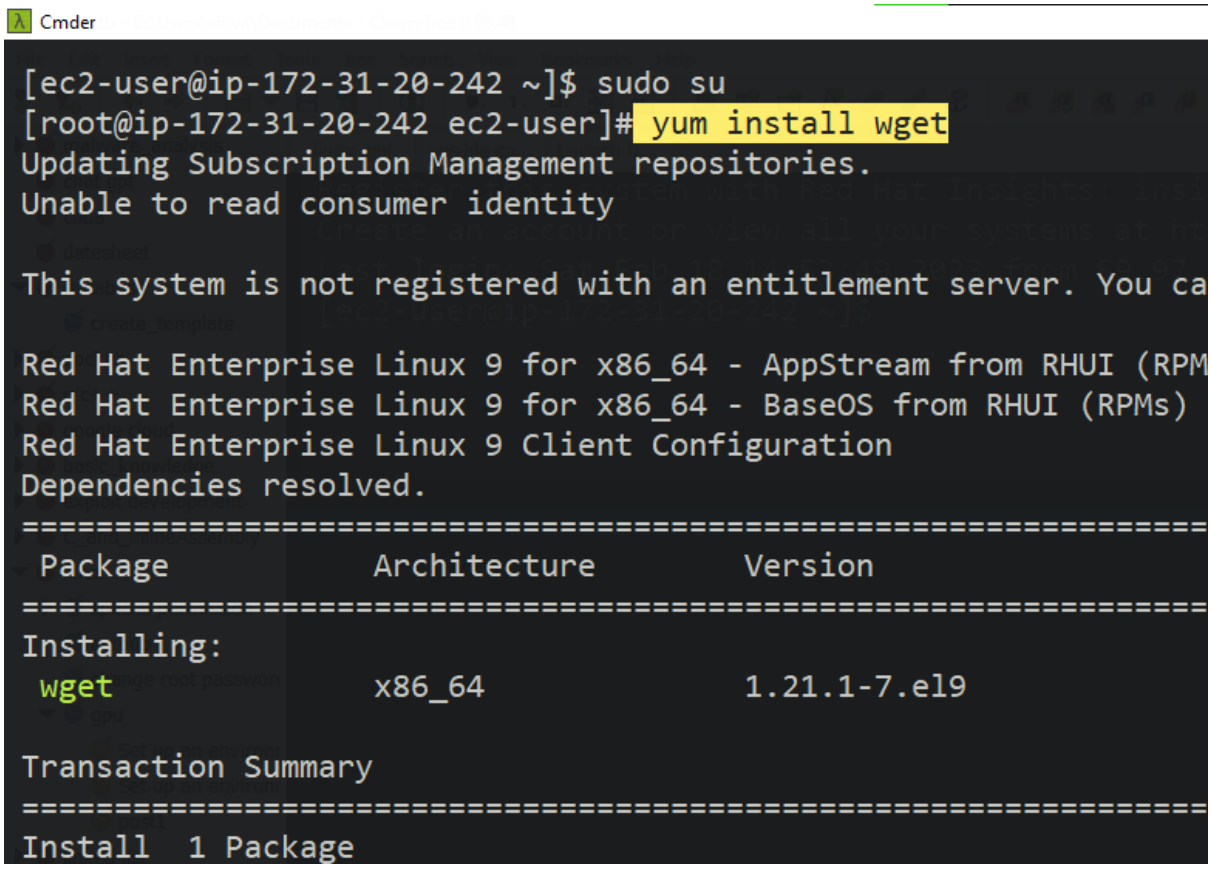


Connect through SSH in my windows machine:

Here I'm using CMDER tool for Commandline:

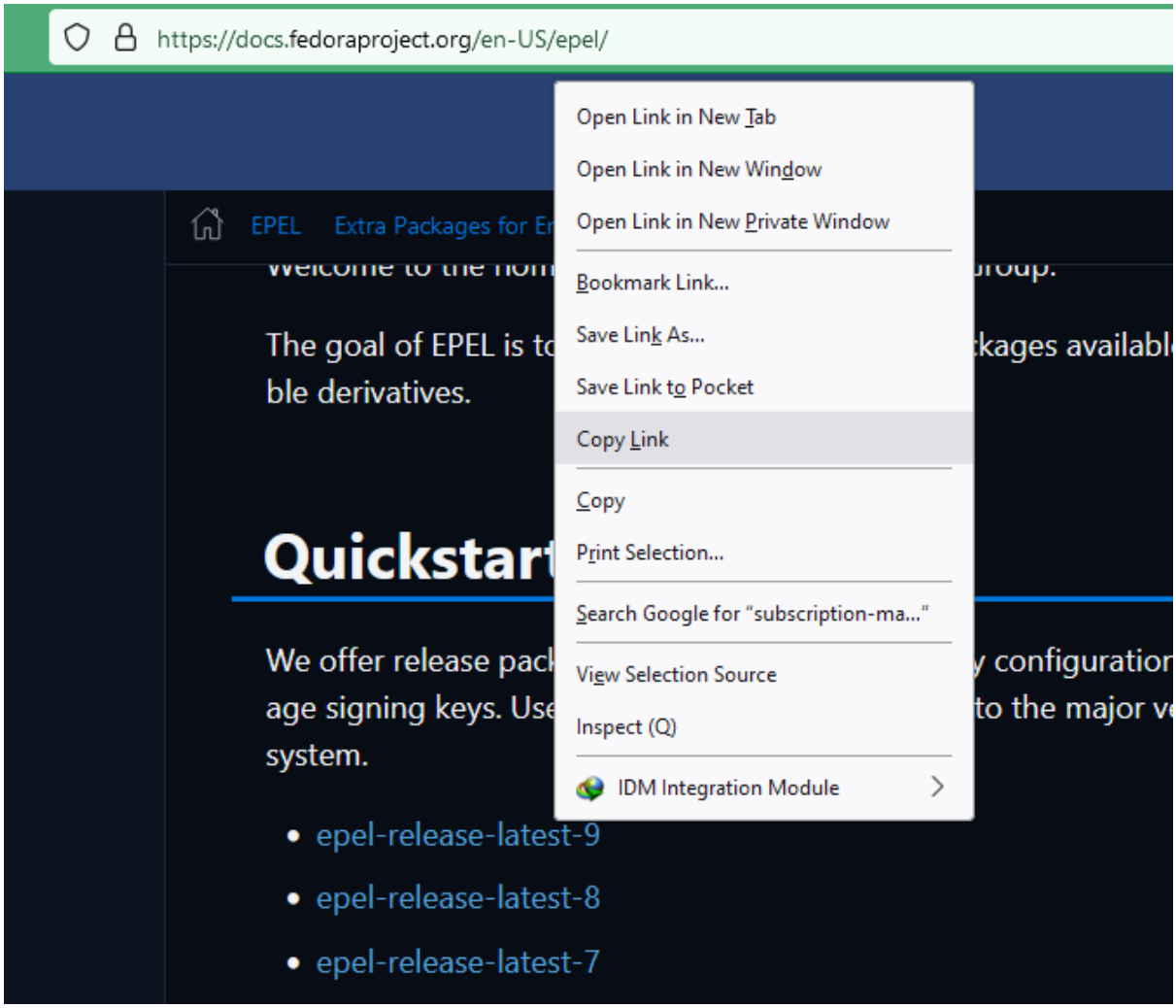


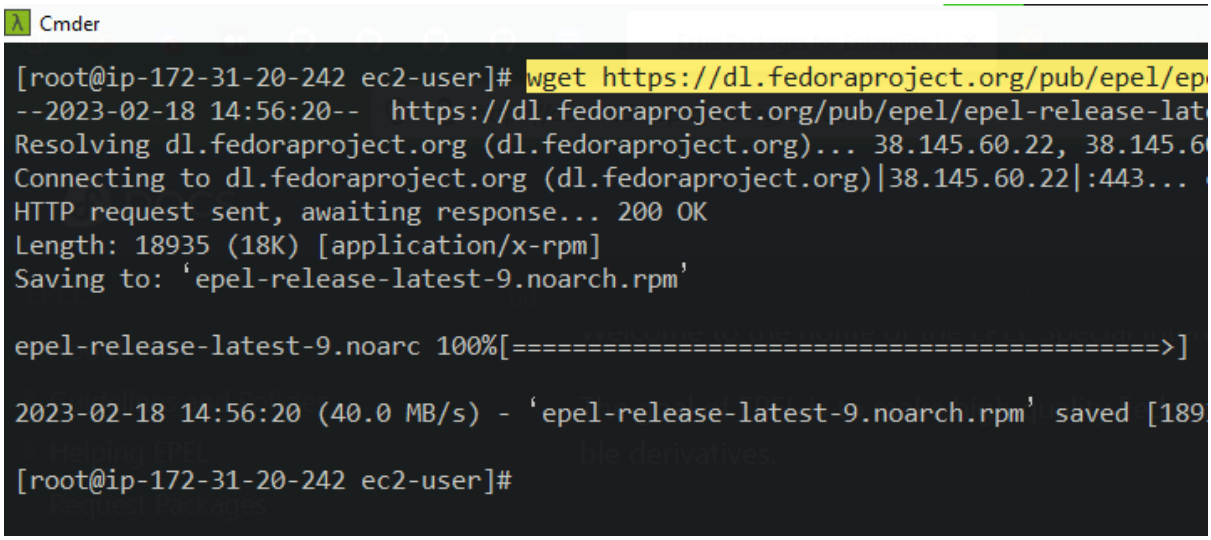
Install wget -: it helps to download any file.



Now download : **Extra Packages for Enterprise Linux**

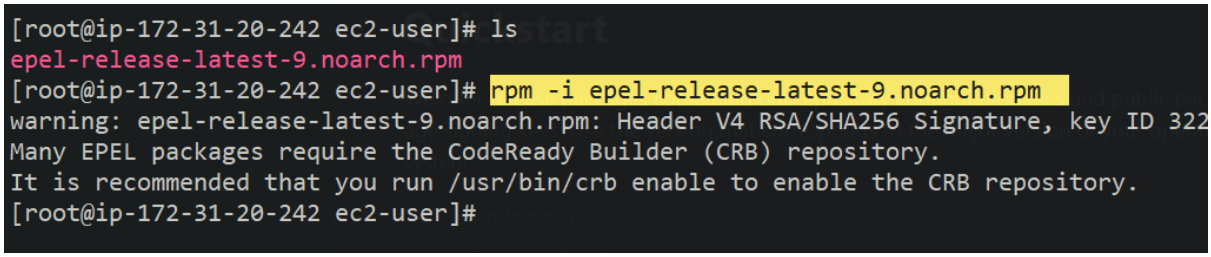
:



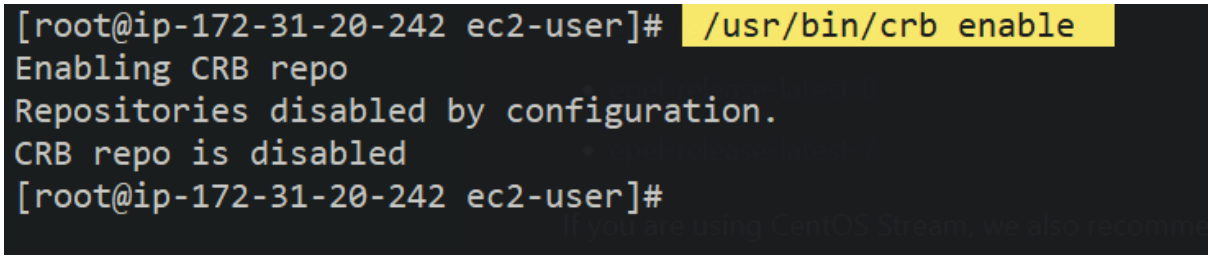


Now install the epel package through rpm:

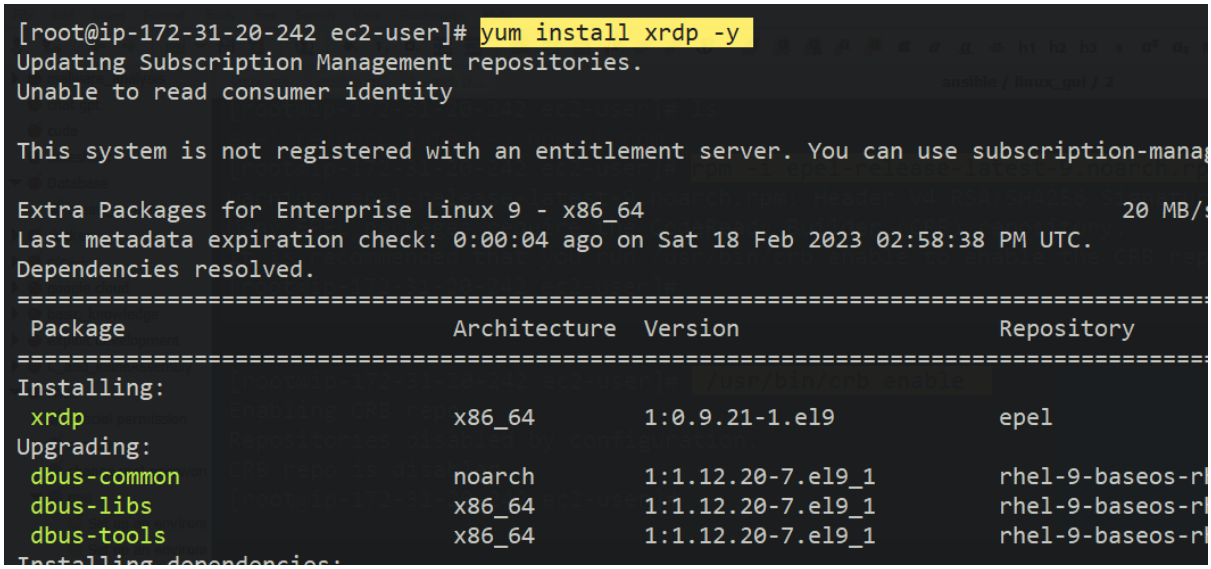
RPM-> Redhat Package Manager is used to install any package in Redhat , Behind the scene YUM and DNF use RPM to install any package.



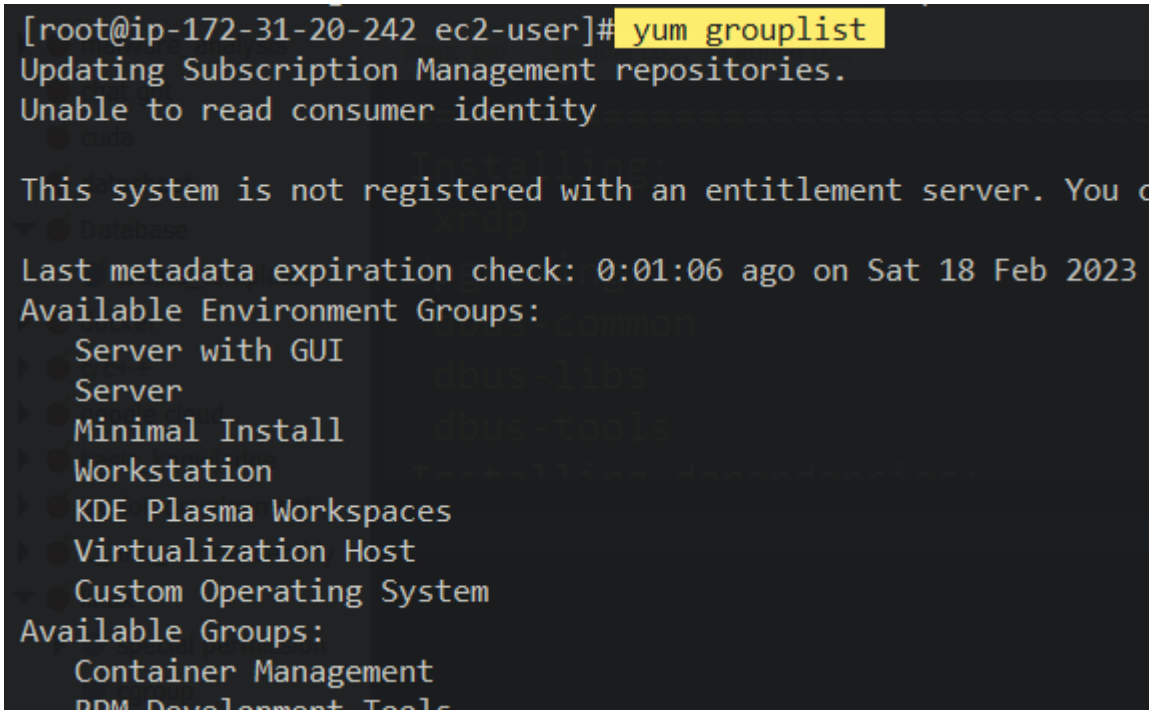
Here I enable CodeReady Builder Repository



Now we install **XRDP** server for remote login:

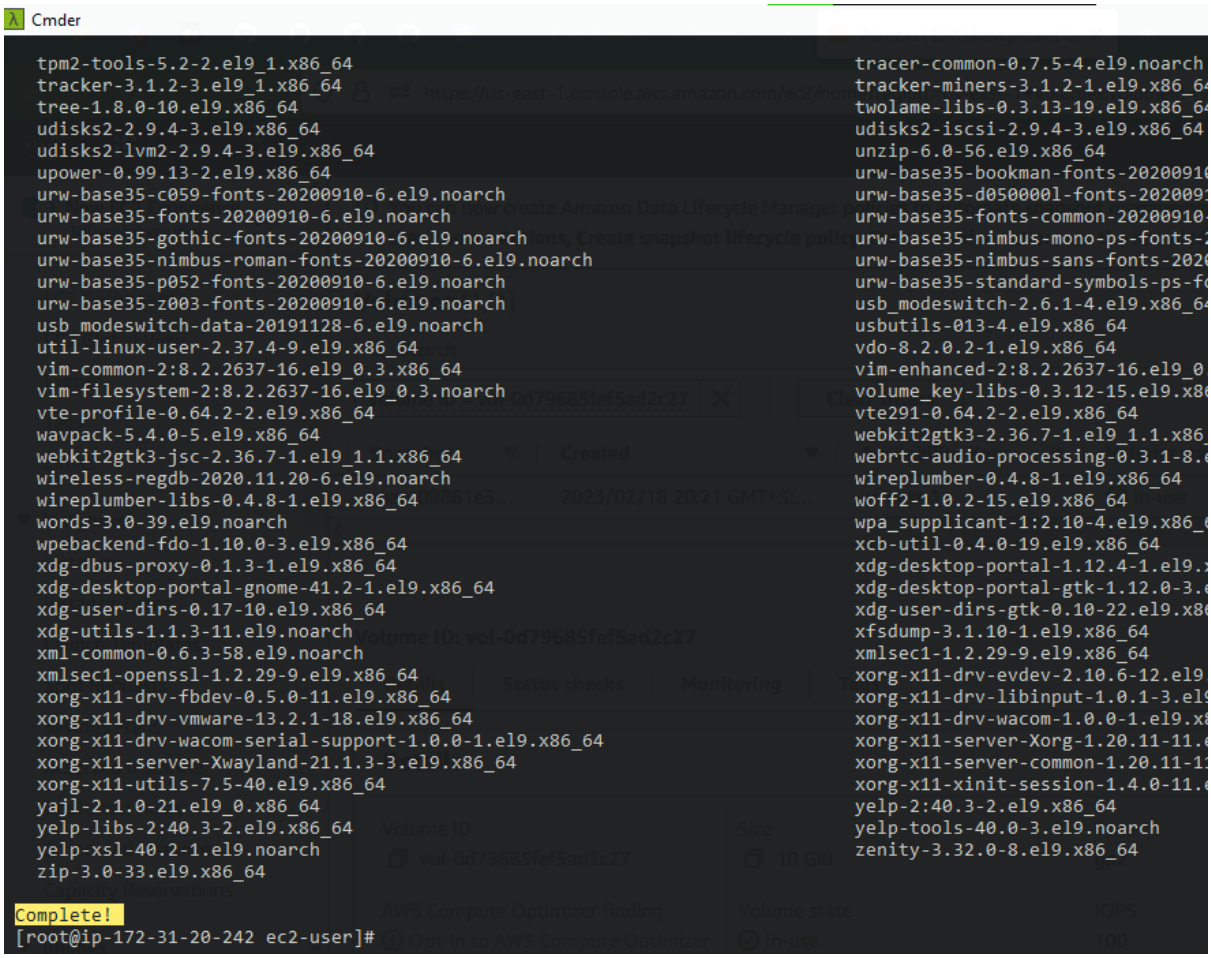


Here we list the groups of package :

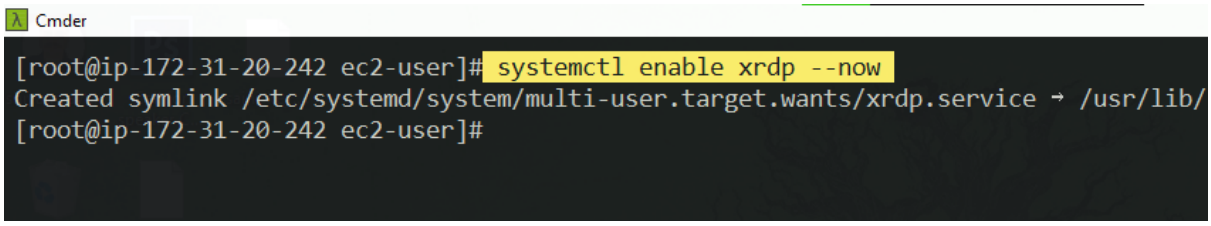


>>> **yum groupinstall “Server with GUI”**

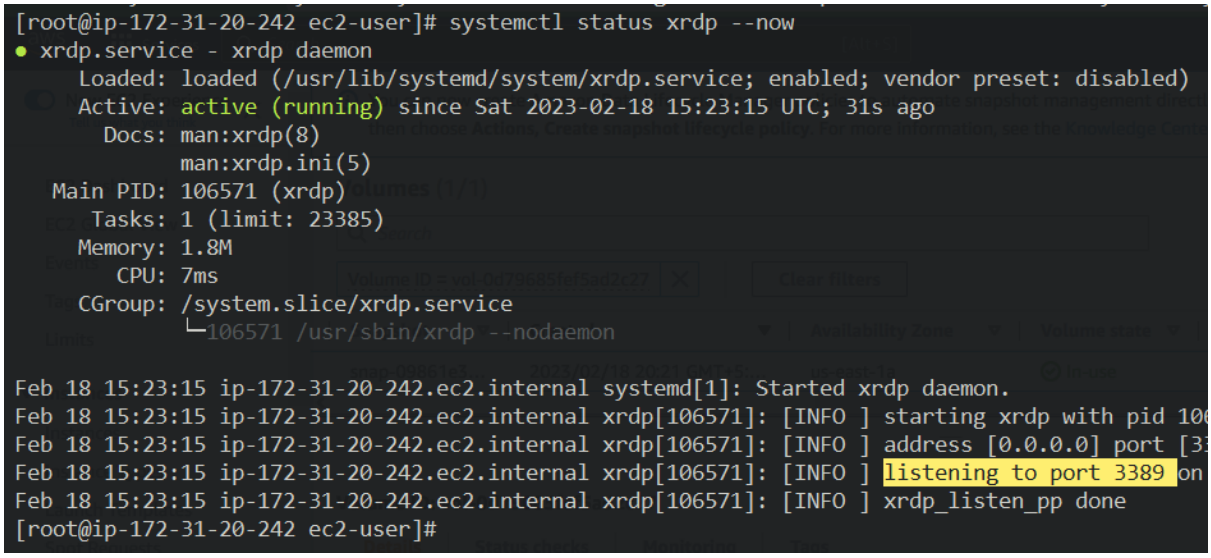
if this step fail : restart our instance : again run above command



Now start the XRDP server

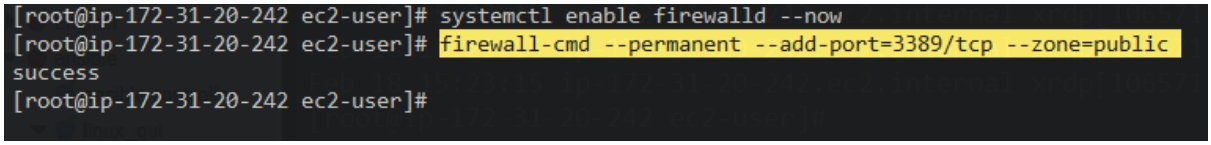


WE check the status of XRDP server



create a firewall rule for our XRDP server:

>>> **firewall-cmd --permanent --add-port=3389/tcp --zone=public**



Now we check the runlevel of our system:

there are 7 types of runlevel :

after booting process our systemd(first process) start our default runlevel:

Run Level	Mode	Action
0	Halt	Shuts down system
1	Single-User Mode	Does not configure network interfaces
2	Multi-User Mode	Does not configure network interfaces.
3	Multi-User Mode with Networking	Starts the system normally.
4	Undefined	Not used/User-definable
5	X11	As runlevel 3 + display manager(X)
6	Reboot	Reboots the system

```
[root@ip-172-31-20-242 ec2-user]# cd /etc/systemd/system
[root@ip-172-31-20-242 system]# ls
 basic.target.wants                          dbus.service
 bluetooth.target.wants                      default.target
 cloud-init.target.wants                     default.target.wants
 ctrl-alt-del.target                        'dev-virtio\x2dports-org.qemu.guest_agent.0.device.wants'
 dbus-org.bluez.service                      display-manager.service
 dbus-org.fedoraproject.FirewallD1.service   getty.target.wants
 dbus-org.freedesktop.Avahi.service          graphical.target.wants
 dbus-org.freedesktop.ModemManager1.service  local-fs.target.wants
 dbus-org.freedesktop.nm-dispatcher.service  multi-user.target.wants
```

Here our default.target file link with multi-user Runlevel

```
[root@ip-172-31-20-242 system]# ls -l default.target
lrwxrwxrwx. 1 root root 41 Jan 27 05:39 default.target -> /usr/lib/systemd/system/multi-user.target
[root@ip-172-31-20-242 system]#
```

Here we change the default Runlevel:

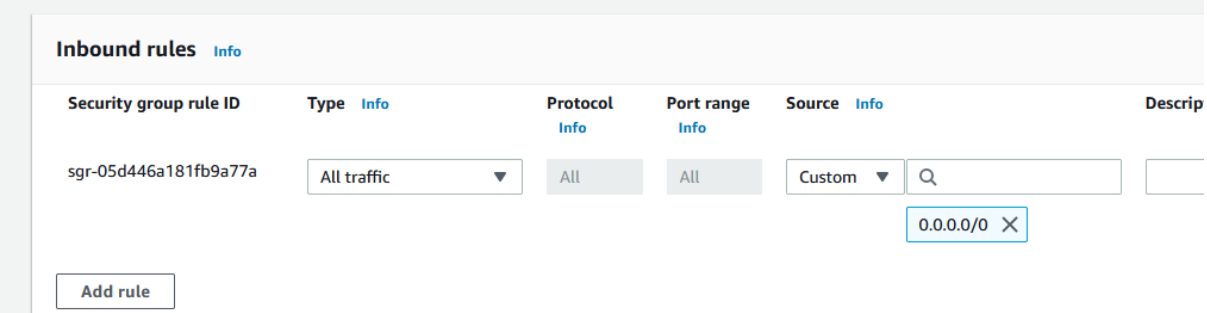
```
[root@ip-172-31-20-242 system]# systemctl set-default graphical.target
Removed "/etc/systemd/system/default.target".
Created symlink /etc/systemd/system/default.target → /usr/lib/systemd/system/graphical.target.
[root@ip-172-31-20-242 system]#
```

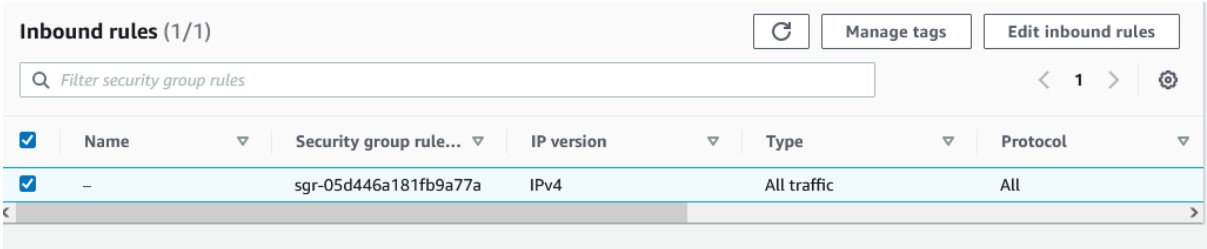
Now we can see our default.target file link to graphical.target file

```
λ Cmder
[root@ip-172-31-20-242 system]# ls -l default.target
lrwxrwxrwx. 1 root root 40 Feb 18 15:32 default.target -> /usr/lib/systemd/system/graphical.target
[root@ip-172-31-20-242 system]#
```

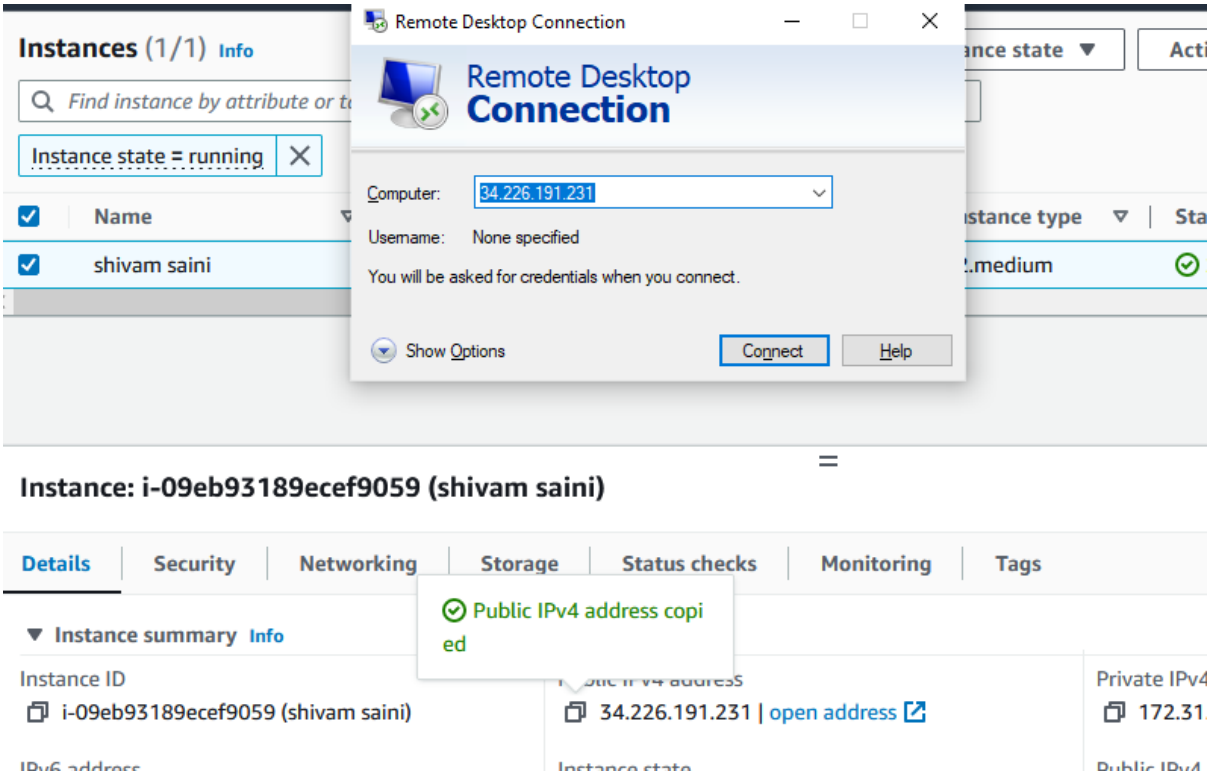
Here we create an inbound rule for our instance in AWS:

It is an one type of firewall (security group) provided by AWS ,it protect our VM's





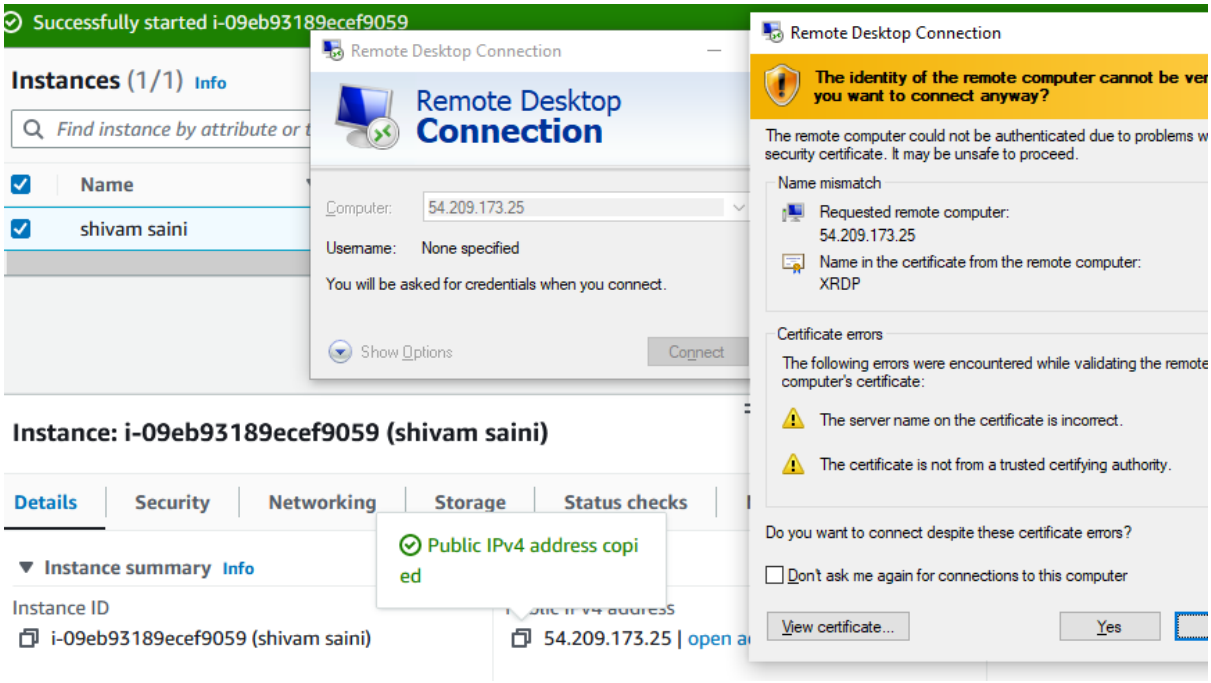
Now we open Remote Desktop Connection in Windows:



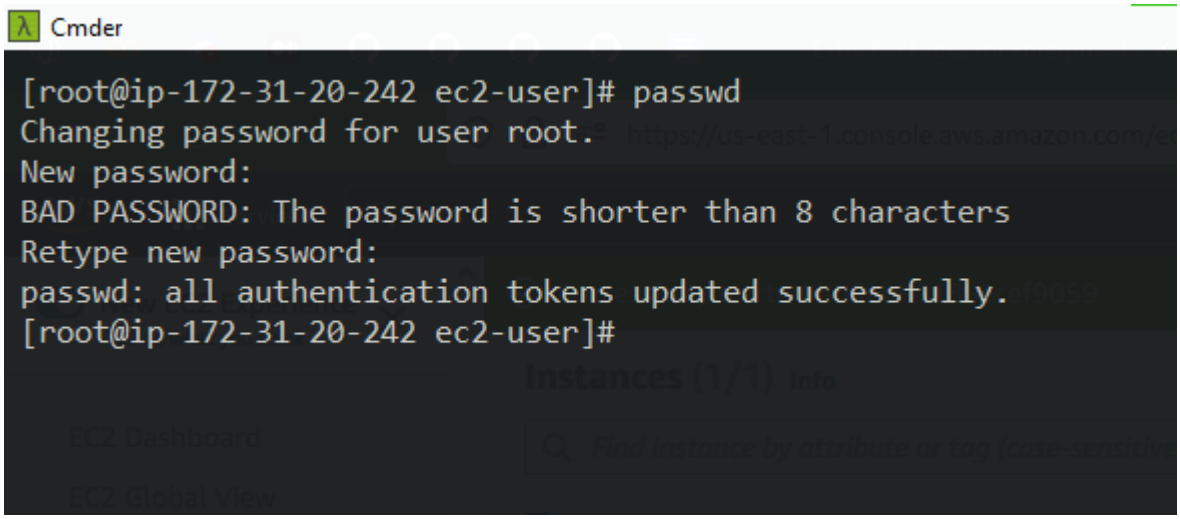
Here I shutdown then restart our system because we install many packages previously:

```
[root@ip-172-31-20-242 system]# init 0
Connection to 34.226.191.231 closed by remote host.
Connection to 34.226.191.231 closed.
shiva@DESKTOP-DOUUI5C ~/Desktop
λ
```

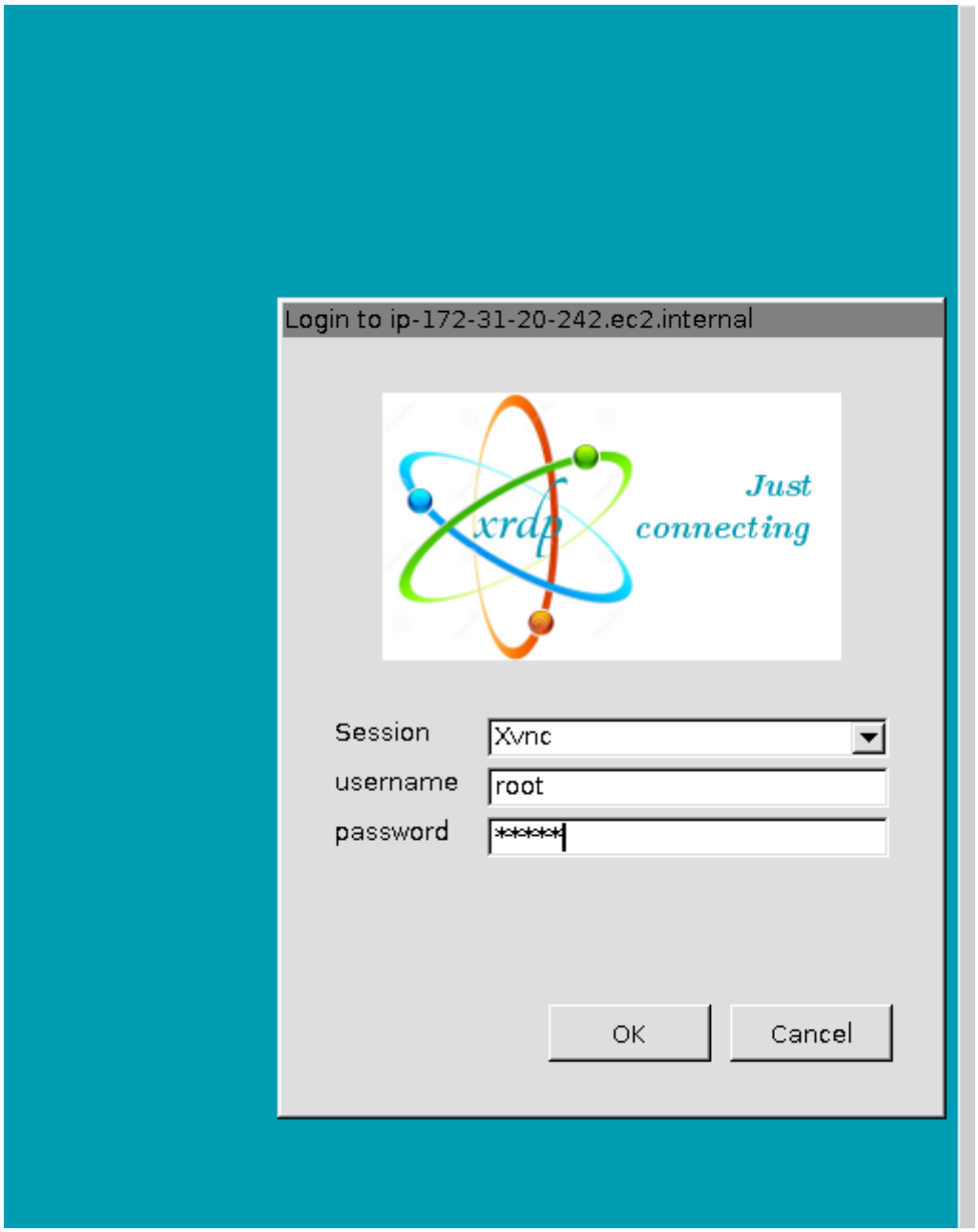
Now I Connect our RDP Server through RDP Client:



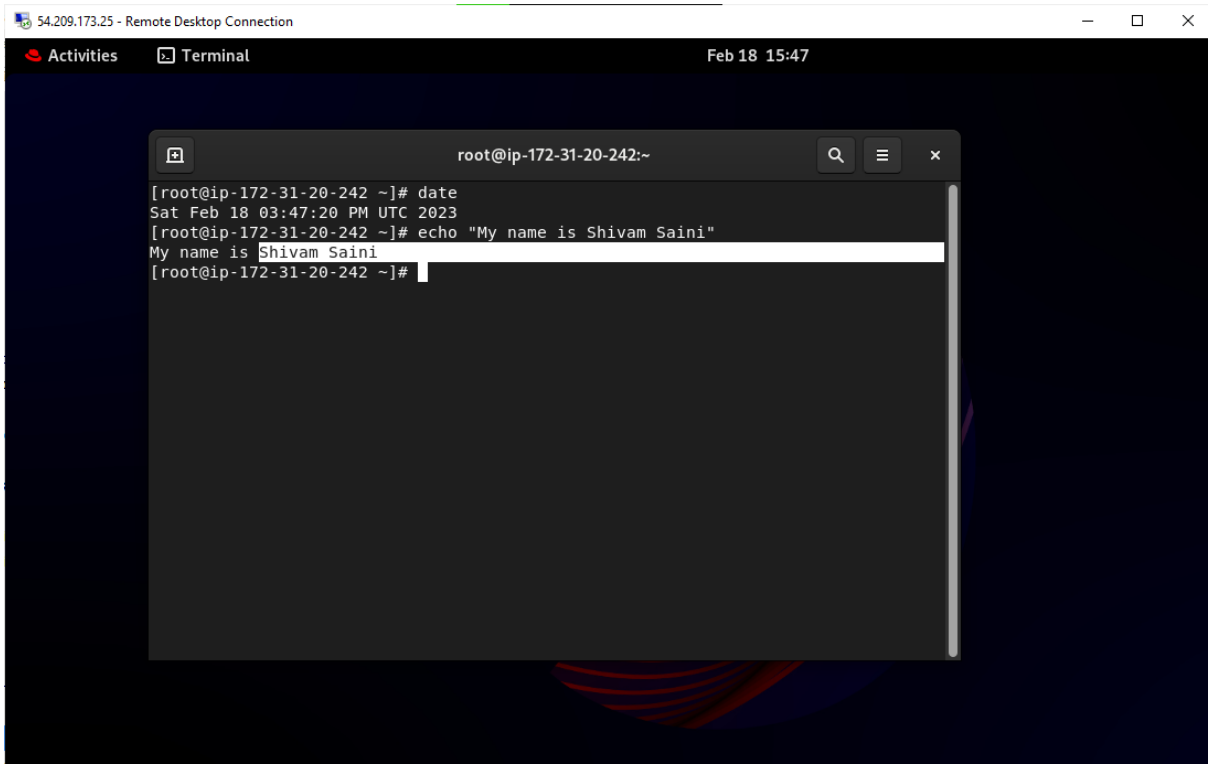
It Require ROOT password so we change it:



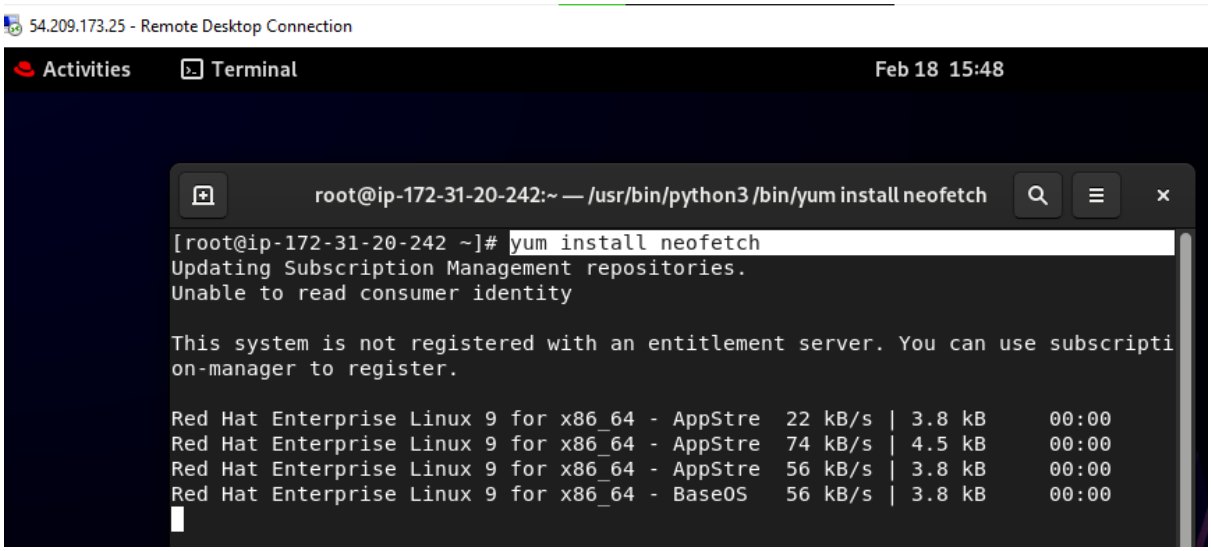
Here we enter our User name and password:



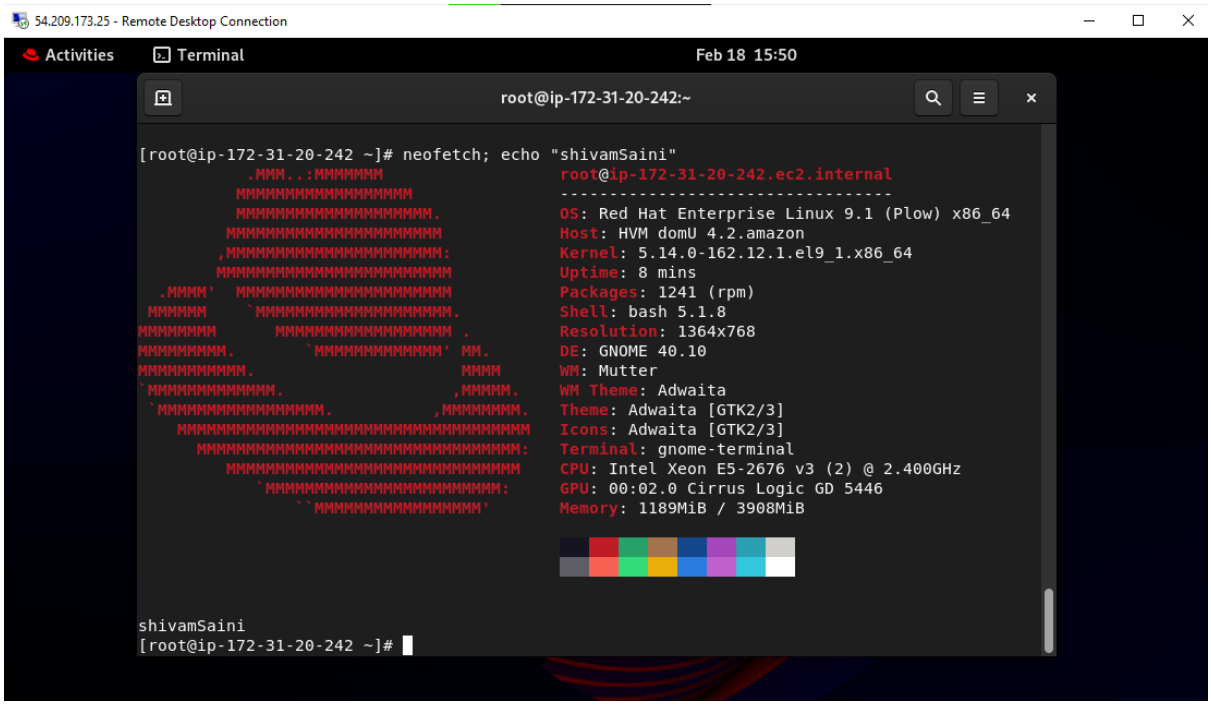
Now we successfully Login in GUI mode:



Here We install Neofetch:



* Successfully Launch Instance in GUI Mode*



****

****

****

****

****

****

****

****