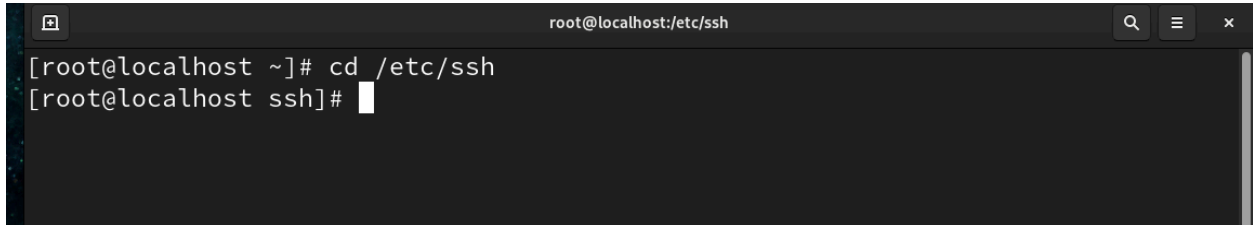


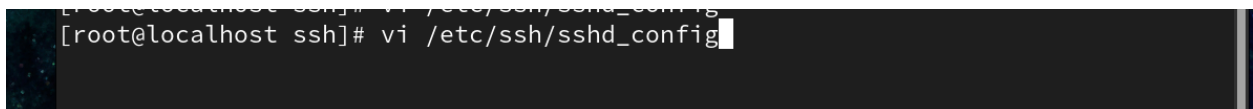
Assignment no.1

1. Go to the ssh folder

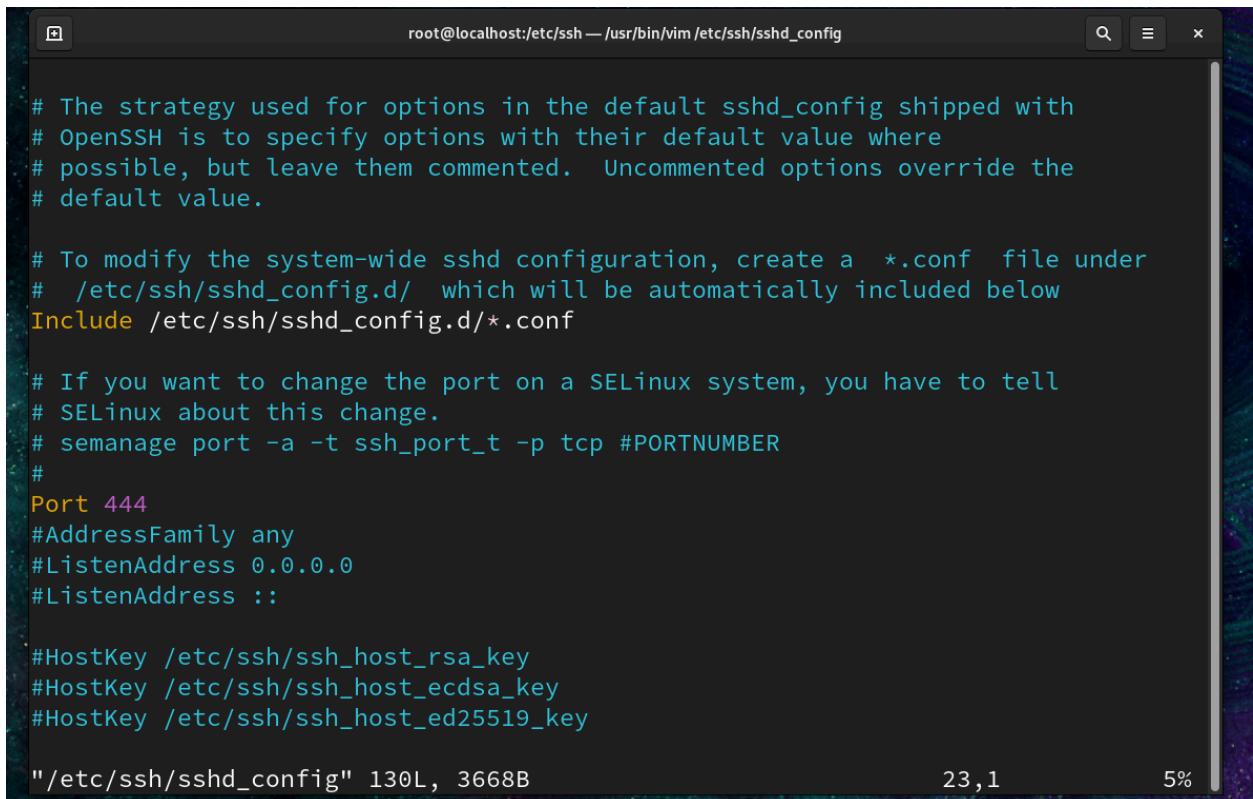


```
root@localhost:~# cd /etc/ssh
root@localhost:ssh#
```

2. After this command, this file will open we had to edit it anyway



```
root@localhost:ssh# vi /etc/ssh/sshd_config
root@localhost:ssh# vi /etc/ssh/sshd_config
```



```
root@localhost:etc/ssh — /usr/bin/vim /etc/ssh/sshd_config

# The strategy used for options in the default sshd_config shipped with
# OpenSSH is to specify options with their default value where
# possible, but leave them commented.  Uncommented options override the
# default value.

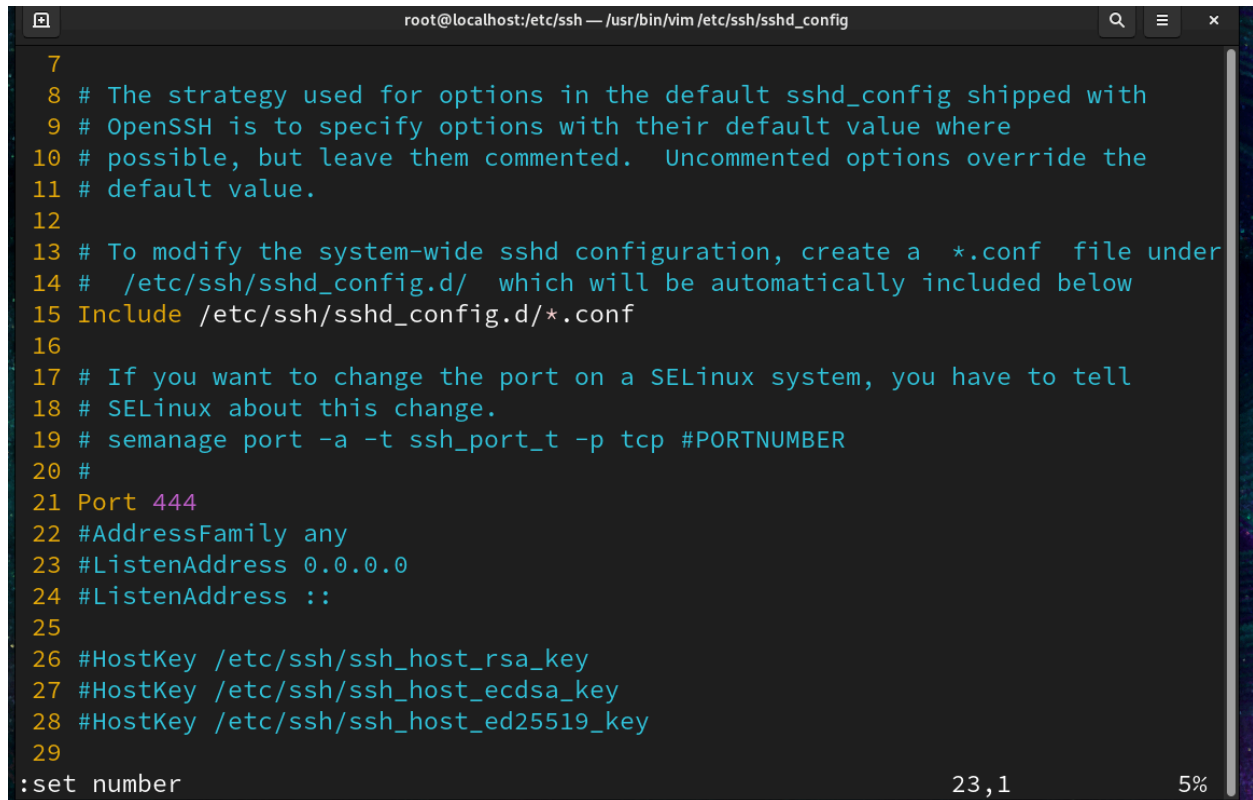
# To modify the system-wide sshd configuration, create a *.conf file under
# /etc/ssh/sshd_config.d/ which will be automatically included below
Include /etc/ssh/sshd_config.d/*.conf

# If you want to change the port on a SELinux system, you have to tell
# SELinux about this change.
# semanage port -a -t ssh_port_t -p tcp #PORTNUMBER
#
Port 444
#AddressFamily any
#ListenAddress 0.0.0.0
#ListenAddress ::

#HostKey /etc/ssh/ssh_host_rsa_key
#HostKey /etc/ssh/ssh_host_ecdsa_key
#HostKey /etc/ssh/ssh_host_ed25519_key

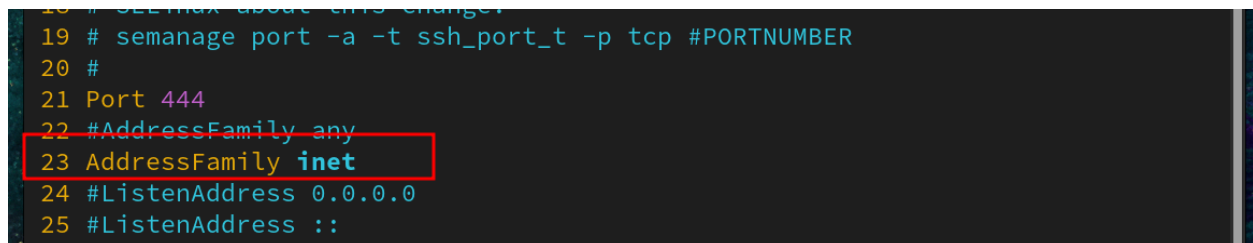
"/etc/ssh/sshd_config" 130L, 3668B                23,1                5%
```

3. Use this command :set number



```
7
8 # The strategy used for options in the default sshd_config shipped with
9 # OpenSSH is to specify options with their default value where
10 # possible, but leave them commented. Uncommented options override the
11 # default value.
12
13 # To modify the system-wide sshd configuration, create a *.conf file under
14 # /etc/ssh/sshd_config.d/ which will be automatically included below
15 Include /etc/ssh/sshd_config.d/*.conf
16
17 # If you want to change the port on a SELinux system, you have to tell
18 # SELinux about this change.
19 # semanage port -a -t ssh_port_t -p tcp #PORTNUMBER
20 #
21 Port 444
22 #AddressFamily any
23 #ListenAddress 0.0.0.0
24 #ListenAddress ::
25
26 #HostKey /etc/ssh/ssh_host_rsa_key
27 #HostKey /etc/ssh/ssh_host_ecdsa_key
28 #HostKey /etc/ssh/ssh_host_ed25519_key
29
:set number                                     23,1                                     5%
```

5. Add this line on 23 number



```
19 # semanage port -a -t ssh_port_t -p tcp #PORTNUMBER
20 #
21 Port 444
22 #AddressFamily any
23 AddressFamily inet
24 #ListenAddress 0.0.0.0
25 #ListenAddress ::
```

6. Add this in 41 line

```
37
38 # Authentication:
39
40 #LoginGraceTime 2m
41 PermitRootLogin yes
42 #PermitRootLogin prohibit-password
43 #StrictModes yes
44 #MaxAuthTries 6
45 #MaxSessions 10
46
47 #PubkeyAuthentication yes
48
```

7. Add this line in 104

```
99
100 #AllowAgentForwarding yes
101 #AllowTcpForwarding yes
102 #GatewayPorts no
103 #X11Forwarding no
104 X11Forwarding yes
105 #X11DisplayOffset 10
106 #X11UseLocalhost yes
107 #PermitTTY yes
108 #PrintMotd yes
109 #PrintLastLog yes
110 #TCPKeepAlive yes
111 #PermitUserEnvironment no
```

8. Add this :wq! to save the file

```
101 #AllowTcpForwarding yes
102 #GatewayPorts no
103 #X11Forwarding no
104 X11Forwarding yes
105 #X11DisplayOffset 10
106 #X11UseLocalhost yes
107 #PermitTTY yes
108 #PrintMotd yes
109 #PrintLastLog yes
110 #TCPKeepAlive yes
111 #PermitUserEnvironment no
112 #Compression delayed
113 #ClientAliveInterval 0
114 #ClientAliveCountMax 3
115 #UseDNS no
:wq!
```

9. Add this line in 23 and save it

```
12 # Any configuration value is only changed the first time it is set.
13 # Thus, host-specific definitions should be at the beginning of the
14 # configuration file, and defaults at the end.
15
16 # Site-wide defaults for some commonly used options. For a comprehensive
17 # list of available options, their meanings and defaults, please see the
18 # ssh_config(5) man page.
19
20 # Host *
21 #     ForwardAgent no
22 #     ForwardX11 no
23 Forward11 yes
24 #     PasswordAuthentication yes
25 #     HostbasedAuthentication no
26 #     GSSAPIAuthentication no
27 #     GSSAPIDelegateCredentials no
28 #     GSSAPIKeyExchange no
:wq!
```

10. After writing this command you can see it is already enabled and success

```
[root@localhost ssh]# cd
[root@localhost ~]#
[root@localhost ~]# firewall-cmd --permanent --zone=public --add-service=ssh
Warning: ALREADY_ENABLED: ssh
success
[root@localhost ~]#
```

11. After this command we see the success means it has been done

```
[root@localhost ~]# firewall-cmd --reload
success
```

12. List is also active and success

```
[root@localhost ~]# firewall-cmd --list-all
public (active)
  target: default
  icmp-block-inversion: no
  interfaces: enp0s3
  sources:
  services: cockpit dhcpv6-client ssh
  ports:
  protocols:
  forward: yes
  masquerade: no
  forward-ports:
  source-ports:
  icmp-blocks:
  rich rules:
[root@localhost ~]#
```

13. We can see the active status here

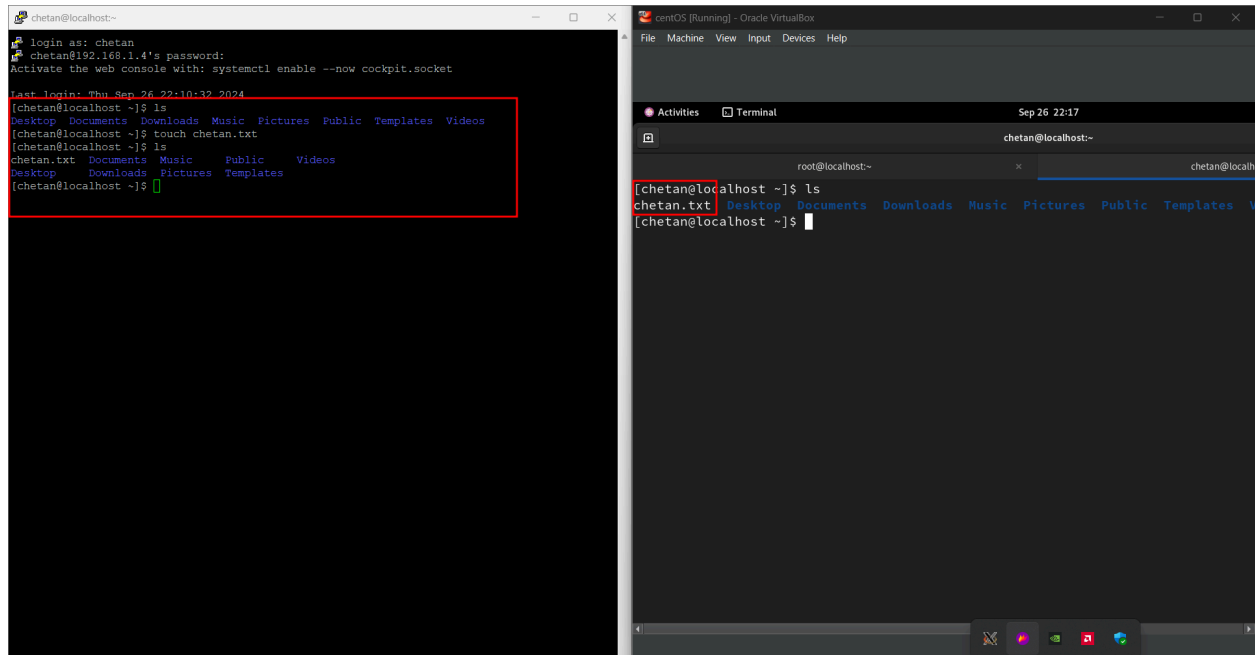
```

[... rules ...]
[root@localhost ~]# systemctl restart sshd
[root@localhost ~]# systemctl status sshd
● sshd.service - OpenSSH server daemon
   Loaded: loaded (/usr/lib/systemd/system/sshd.service; enabled; preset: enabled)
   Active: active (running) since Thu 2024-09-26 22:14:40 IST; 7s ago
     Docs: man:sshd(8)
           man:sshd_config(5)
  Main PID: 5516 (sshd)
    Tasks: 1 (limit: 23020)
   Memory: 1.4M
      CPU: 21ms
   CGroup: /system.slice/sshd.service
           └─5516 "sshd: /usr/sbin/sshd -D [listener] 0 of 10-100 startups"

Sep 26 22:14:40 localhost.localdomain systemd[1]: Starting OpenSSH server daemon...
Sep 26 22:14:40 localhost.localdomain sshd[5516]: Server listening on 0.0.0.0 port 22.
Sep 26 22:14:40 localhost.localdomain systemd[1]: Started OpenSSH server daemon.
[root@localhost ~]#
```

14. After downloading the Xming Xserver and putty

In putty i had connected the ip address of centos and you can it get access properly and created the file there and it is showing in centos so in these we can access the remote system



The image contains two side-by-side terminal window screenshots. The left window shows a user logging in as 'chetan' and then running a series of commands to create a file and list the directory. The right window shows the same terminal session from a different perspective, highlighting the file creation and listing commands.

```
login as: chetan
Chetan@192.168.1.4's password:
Activate the web console with: systemctl enable --now cockpit.socket

Last login: Thu Sep 26 22:10:32 2024
[chetan@localhost ~]$ ls
desktop  Documents  Downloads  Music  Pictures  Public  Templates  Videos
[chetan@localhost ~]$ touch chetan.txt
[chetan@localhost ~]$ ls
chetan.txt  Documents  Music  Public  Videos
desktop    Downloads  Pictures  Templates
[chetan@localhost ~]$
```

```
centOS [Running] - Oracle VirtualBox
File Machine View Input Devices Help

Activities Terminal Sep 26 22:17
chetan@localhost:~
root@localhost:~ x chetan@localhost:~
[chetan@localhost ~]$ ls
chetan.txt Desktop Documents Downloads Music Pictures Public Templates \
[chetan@localhost ~]$
```