

## Shailesh Task 4

1. Open firewall configuration tool (Windows Firewall or terminal for UFW).

```
└─(vivekreddy@vivekreddy)
```

```
└─$ sudo ufw status
```

Status: inactive

```
└─(vivekreddy@vivekreddy)
```

```
└─$ sudo ufw enable
```

Firewall is active and enabled on system startup

2. List current firewall rules.

```
└─(vivekreddy@vivekreddy)
```

```
└─$ sudo ufw status numbered
```

Status: active

To	Action	From
--	-----	----
22	ALLOW IN	Anywhere
22	ALLOW IN	Anywhere (v6)

3. Block inbound traffic on a specific port (e.g., Telnet - port 23).

```
└─(vivekreddy@vivekreddy)
```

```
└─$ sudo ufw deny 23
```

Rule updated

Rule updated (v6)

4. Test the rule by attempting to connect to that port locally or remotely.

```
└─(vivekreddy@vivekreddy)
```

```
└─$ telnet localhost 23
```

Trying ::1 ...

Connection failed: Connection refused

Trying 127.0.0.1 ...

telnet: Unable to connect to remote host: Connection refused

5. Add rule to allow SSH (port 22) if on Linux.

```
└─(vivekreddy@vivekreddy)
```

```
└─$ sudo ufw allow 22
```

Rule added

Rule added (v6)

6. Remove the test block rule to restore original state.

```
└─(vivekreddy@vivekreddy)
```

```
└─$ sudo ufw delete deny 23
```

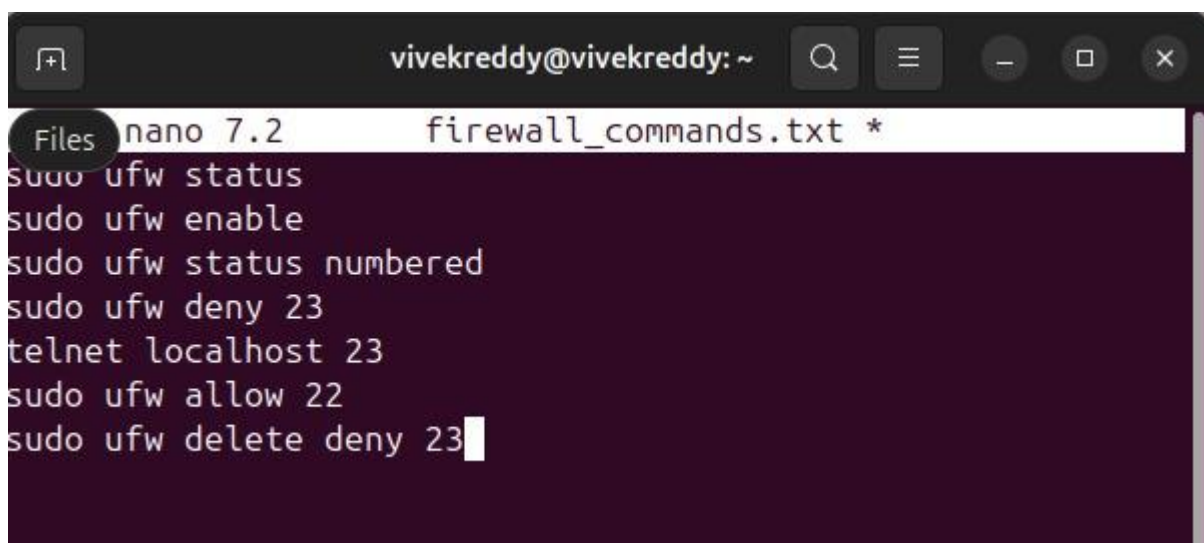
Rule deleted

Rule deleted (v6)

7. Document commands or GUI steps used.

```
└─(vivekreddy@vivekreddy)
```

```
└─$ nano firewall_commands.txt
```

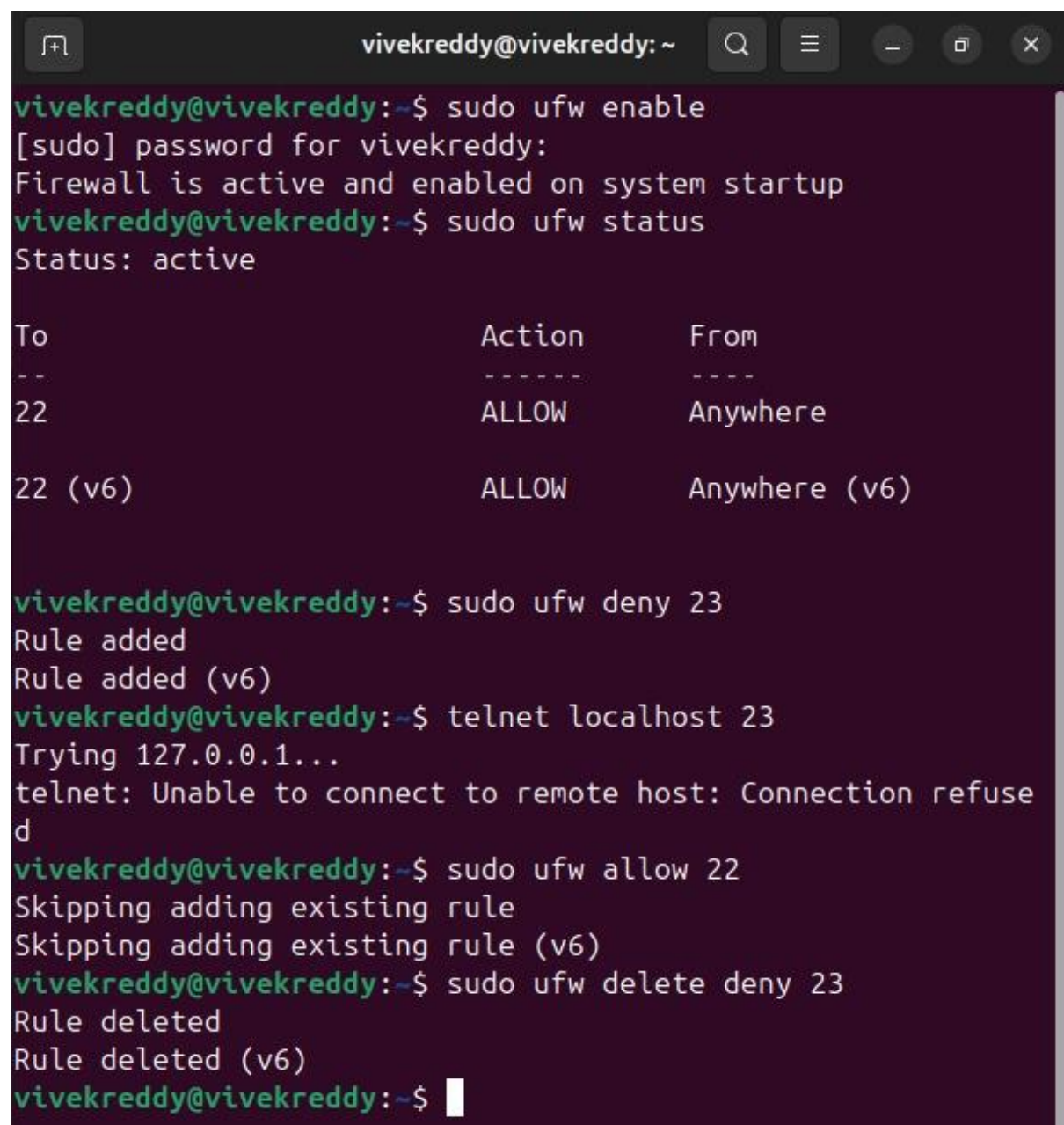


```
vivekreddy@vivekreddy: ~  
Files nano 7.2 firewall_commands.txt *  
sudo ufw status  
sudo ufw enable  
sudo ufw status numbered  
sudo ufw deny 23  
telnet localhost 23  
sudo ufw allow 22  
sudo ufw delete deny 23
```

## 8. Summarize how firewall filters traffic.

UFW is a simple tool to manage iptables-based firewall rules in Linux. By default, it denies all incoming traffic and allows all outgoing. Rules can be added to allow or deny traffic based on port or IP address. This exercise showed how blocking port 23 (Telnet) stopped access, and allowing port 22 (SSH) ensured secure remote access.

Screenshot:



```
vivekreddy@vivekreddy: ~  
vivekreddy@vivekreddy:~$ sudo ufw enable  
[sudo] password for vivekreddy:  
Firewall is active and enabled on system startup  
vivekreddy@vivekreddy:~$ sudo ufw status  
Status: active  
  
To Action From  
--  
22 ALLOW Anywhere  
  
22 (v6) ALLOW Anywhere (v6)  
  
vivekreddy@vivekreddy:~$ sudo ufw deny 23  
Rule added  
Rule added (v6)  
vivekreddy@vivekreddy:~$ telnet localhost 23  
Trying 127.0.0.1...  
telnet: Unable to connect to remote host: Connection refused  
vivekreddy@vivekreddy:~$ sudo ufw allow 22  
Skipping adding existing rule  
Skipping adding existing rule (v6)  
vivekreddy@vivekreddy:~$ sudo ufw delete deny 23  
Rule deleted  
Rule deleted (v6)  
vivekreddy@vivekreddy:~$
```

