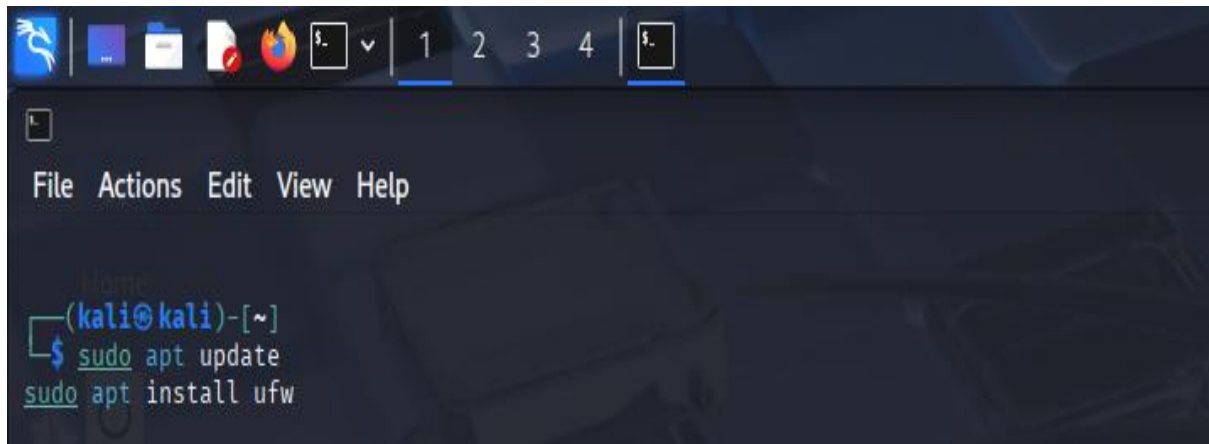


# Task 4 : Setup and Use a Firewall on Windows/Linux

## 1. Open Firewall Configuration Tool

The firewall was configured via the terminal using **UFW (Uncomplicated Firewall)** on Kali Linux.

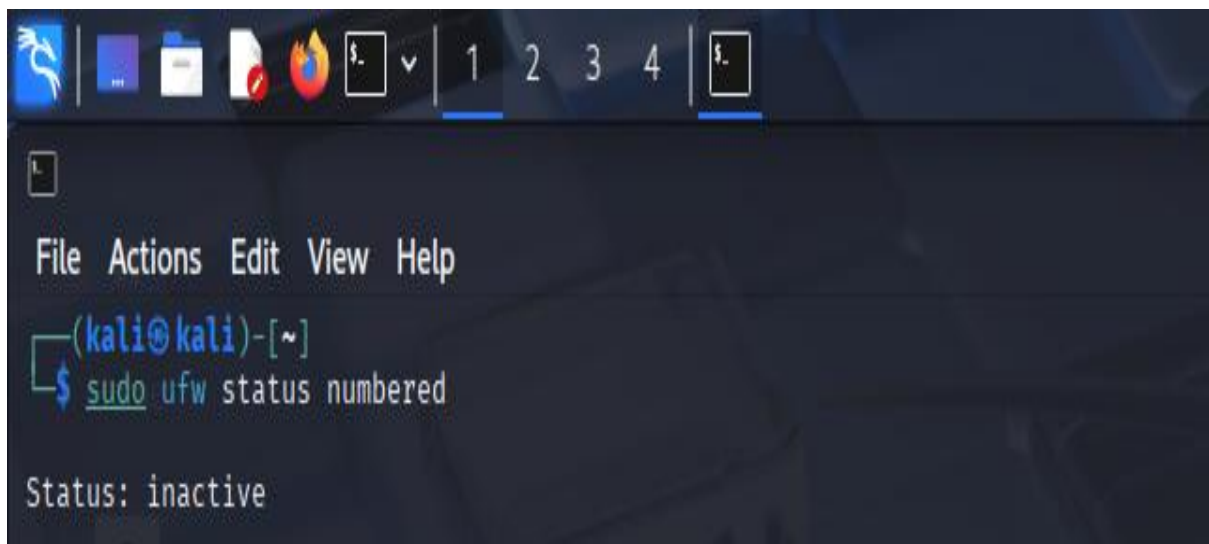


A screenshot of a Kali Linux terminal window. The terminal has a dark blue background with a menu bar at the top containing 'File', 'Actions', 'Edit', 'View', and 'Help'. Below the menu bar, the prompt is '(kali@kali)-[~]'. The user has entered the command 'sudo apt update' and the output is 'sudo apt install ufw'. The terminal window has a title bar with icons for a terminal, a file manager, a web browser, and a terminal window. The taskbar at the bottom shows icons for a terminal, a file manager, a web browser, and a terminal window.

```
(kali@kali)-[~]  
$ sudo apt update  
sudo apt install ufw
```

## 2. List Current Firewall Rules

Initially, UFW was **inactive**. After enabling, firewall rules were listed.

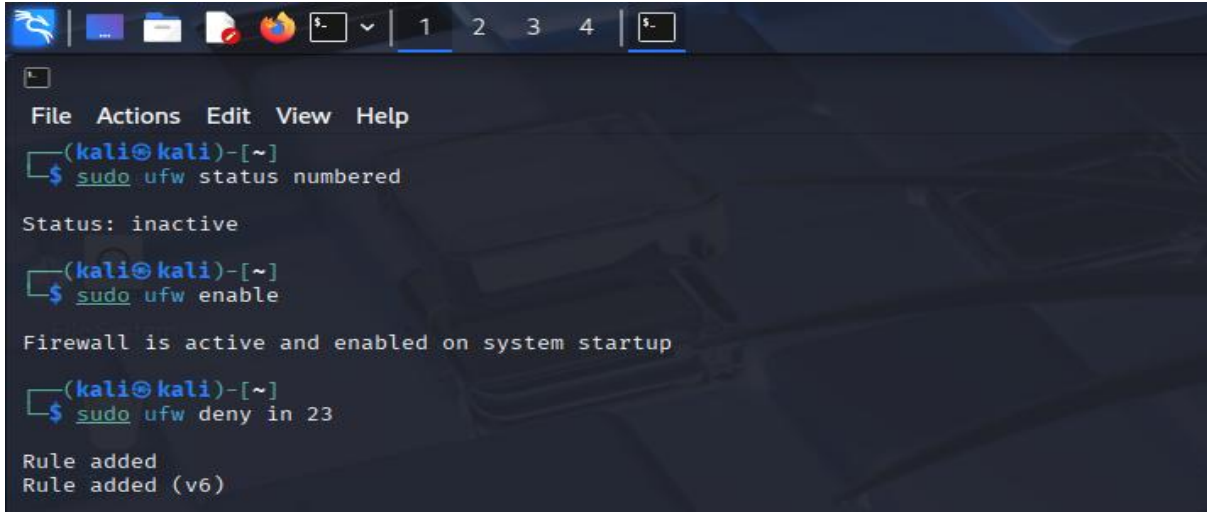


A screenshot of a Kali Linux terminal window. The terminal has a dark blue background with a menu bar at the top containing 'File', 'Actions', 'Edit', 'View', and 'Help'. Below the menu bar, the prompt is '(kali@kali)-[~]'. The user has entered the command 'sudo ufw status numbered'. The output is 'Status: inactive'. The terminal window has a title bar with icons for a terminal, a file manager, a web browser, and a terminal window. The taskbar at the bottom shows icons for a terminal, a file manager, a web browser, and a terminal window.

```
(kali@kali)-[~]  
$ sudo ufw status numbered  
  
Status: inactive
```

### 3. Add a Rule to Block Inbound Traffic on a Specific Port (Port 23 for Telnet)

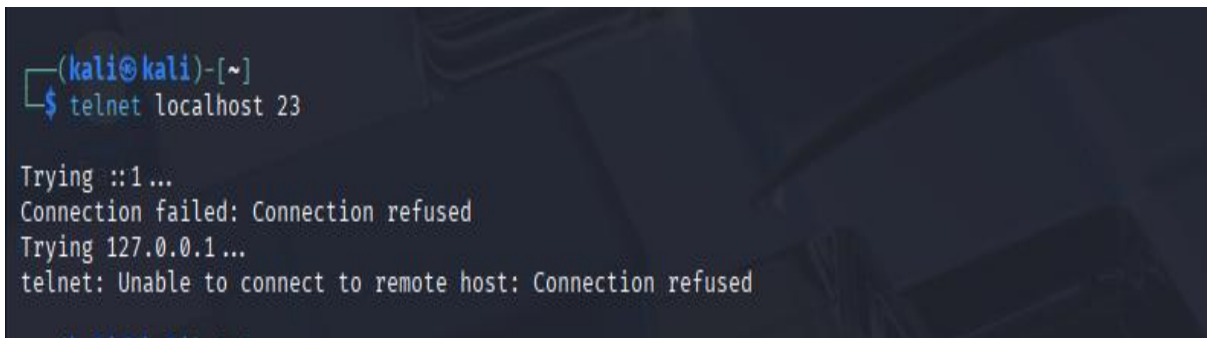
To block Telnet (port 23), the following command is used



```
(kali㉿kali)-[~]  
$ sudo ufw status numbered  
  
Status: inactive  
  
(kali㉿kali)-[~]  
$ sudo ufw enable  
  
Firewall is active and enabled on system startup  
  
(kali㉿kali)-[~]  
$ sudo ufw deny in 23  
  
Rule added  
Rule added (v6)
```

### 4. Test the Rule by Attempting to Connect to That Port

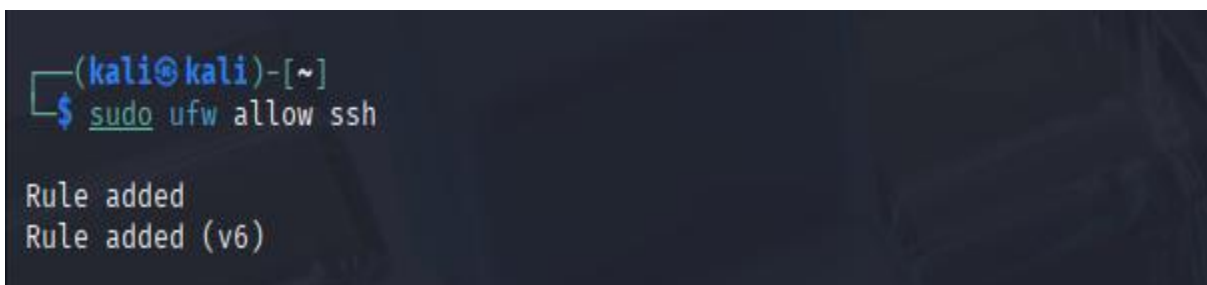
Used telnet to test if port 23 was blocked.



```
(kali㉿kali)-[~]  
$ telnet localhost 23  
  
Trying ::1...  
Connection failed: Connection refused  
Trying 127.0.0.1...  
telnet: Unable to connect to remote host: Connection refused
```

### 5. Allow SSH (Port 22)

To ensure SSH is allowed through the firewall



```
(kali㉿kali)-[~]  
$ sudo ufw allow ssh  
  
Rule added  
Rule added (v6)
```

## 6. Remove the Test Block Rule to Restore Original State

To remove the Telnet block rule (Port 23), the following command is used

```
(kali@kali)-[~]
$ sudo ufw status numbered

Status: active

    To      Action    From
    --      -
[ 1] 23     DENY IN   Anywhere
[ 2] 22/tcp ALLOW IN   Anywhere
[ 3] 23 (v6) DENY IN   Anywhere (v6)
[ 4] 22/tcp (v6) ALLOW IN   Anywhere (v6)

(kali@kali)-[~]
$ sudo ufw delete 1

Deleting:
deny 23
Proceed with operation (y/n)? y
Rule deleted
```

## GUI Steps Used

### Commands Executed:

```
sudo apt update
sudo apt install ufw
sudo ufw status numbered
sudo ufw enable
sudo ufw deny in 23
telnet localhost 23
sudo ufw allow ssh
sudo ufw delete 2
```