Objective: Block and test inbound Telnet (port 23) traffic using Windows Defender Firewall GUI and document outcomes.

Nanagement : Step 1: Open Firewall Management

- Press Win + R
- Type wf.msc → Enter
- This opens the "Windows Defender Firewall with Advanced Security" console.

Step 2: List Existing Rules

- Click **Inbound Rules** in the left panel
- View current rule set: name, profile, port, status

Step 3: Block Inbound Port 23

- 1. Click **New Rule** in right-hand panel
- 2. Choose **Port** → Next
- 3. Protocol = **TCP**, Specific local port = $23 \rightarrow Next$
- 4. Action = **Block the connection** → Next
- 5. Apply to all profiles \rightarrow Next
- 6. Name = Block_Telnet_23 → Finish
- image Taken screenshot of rule created

Step 4: Test With Telnet

Enable Telnet Client:

- Go to: Control Panel \rightarrow Programs \rightarrow Turn Windows features on or off
- Enable **Telnet Client**

Test Command in CMD:

telnet localhost 23

Expected Result:

Could not open connection to the host, on port 23: Connect failed

- image Taken screenshot of failure message
- Step 5: Remove the Rule
 - Go back to Inbound Rules
 - Right-click on Block_Telnet_23 → **Delete**
- ial Taken screenshot the clean rule list
- Summary: How Firewall Filters Traffic
 - Firewalls inspect network packets and enforce rules on:
 - o Ports
 - o Protocols
 - o IP addresses
 - This rule blocked **TCP port 23 (Telnet)** to prevent insecure access
 - Firewall acts as a control point to block unwanted inbound/outbound connections