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

- **Objective: Configure and test basic firewall rules to allow or block traffic.**
- **Tools: Windows Firewall / UFW (Uncomplicated Firewall) on Linux.**
- **Deliverables: Screenshot/configuration file showing firewall rules applied.**

Hints/Mini Guide:

1. Open firewall configuration tool (Windows Firewall or terminal for UFW).
2. List current firewall rules.
3. Add a rule to block inbound traffic on a specific port (e.g., 23 for Telnet).
4. Test the rule by attempting to connect to that port locally or remotely.
5. Add rule to allow SSH (port 22) if on Linux.
6. Remove the test block rule to restore original state.
7. Document commands or GUI steps used.
8. Summarize how firewall filters traffic.

Outcome: Basic firewall management skills and understanding of network traffic filtering.

Interview Questions:

1. What is a firewall?
2. Difference between stateful and stateless firewall?
3. What are inbound and outbound rules?
4. How does UFW simplify firewall management?
5. Why block port 23 (Telnet)?
6. What are common firewall mistakes?
7. How does a firewall improve network security?
8. What is NAT in firewalls?

Key Concepts: **Firewall configuration, network traffic filtering, ports, UFW, Windows Firewall.**

📤 **Submit Here:**
After completing the task, paste your GitHub repo link and submit it using the link below:

- 👉 [Submission Link]

📌 **Task Submission Guidelines**

- ⏰ **Time Window:**

You can complete the task anytime between 10:00 AM to 10:00 PM on the given day. Submission link closes at 10 :00 PM

- 🔍 **Self-Research Allowed:**

You are free to explore, Google, or refer to tutorials to understand concepts and complete the task effectively.

- 🛠️ **Debug Yourself:**

Try to resolve all errors by yourself. This helps you learn problem-solving and ensures you don't face the same issues in future tasks.

- 💸 **No Paid Tools:**

If the task involves any paid software/tools, do not purchase anything. Just learn the process or find free alternatives.

- 📁 **GitHub Submission:**

Create a new GitHub repository for each task.
Add everything you used for the task — code, datasets, screenshots (if any), and a **short README.md** explaining what you did.

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