## **Networking commands:**

#### Linux/Unix:

- 1. ifconfig or ip addr:
  - o <u>Displays or configures network interfaces.</u>
  - Example: ip addr show eth0
- 2. <u>ping:</u>
  - Tests connectivity between your computer and a target.
  - o Example: ping google.com
- 3. traceroute:
  - o <u>Traces the route packets take to reach a network host.</u>
  - Example: traceroute google.com
- 4. <u>netstat:</u>
  - Displays network connections, routing tables, interface statistics, etc.
  - Example: netstat -an
- 5. <u>nslookup:</u>
  - Queries DNS to obtain domain name or IP address mapping.
  - o Example: nslookup google.com
- 6. route:
  - Displays or manipulates the IP routing table.
  - Example: route -n
- 7. dig:
  - o **Queries DNS servers.**
  - o Example: dig google.com

## **Advanced Networking commands:**

#### Linux/Unix:

# 1. <u>iptables:</u>

- o Configures packet filtering, NAT, and other network-related tasks in the Linux kernel.
- Example: iptables -L

# 2. tcpdump:

- Captures and analyzes network traffic.
- o **Example: tcpdump -i eth0**

# 3. <u>nmap:</u>

- Scans networks and ports for security auditing.
- o Example: nmap -sP 192.168.1.0/24

# 4. <u>ip rule:</u>

- Manages advanced routing rules.
- o <u>Example: ip rule add from 192.168.1.0/24 table 100</u>

# 5. <u>ss:</u>

- Provides detailed information about socket connections, replacing netstat.
- o Example: ss -tunlp

# 6. ethtool:

- Displays and changes ethernet device settings.
- Example: ethtool eth0