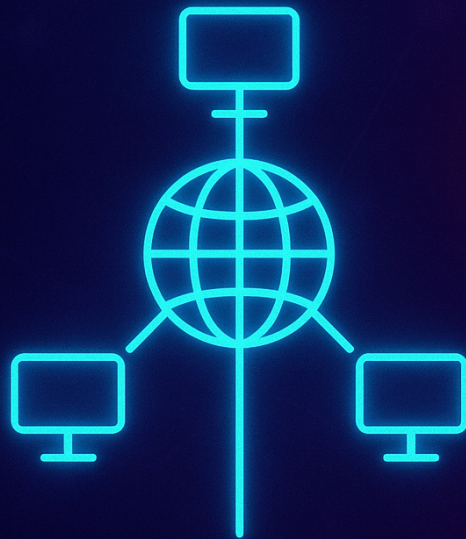


AYAN'S GUIDE TO NETWORKING AND HACKING





Ayan's Guide to Networking and Hacking (For Beginners)

Network Ke Important Topics

1. Networking Kya Hai?

Networking ka matlab hai do ya zyada computers ek dusre se data share karne ke liye connect hona. Isse resources share karna, internet access, aur communication aasaan ho jata hai.

2. Types of Networks

- **LAN (Local Area Network):** Chhoti jagah jaise ghar ya office mein hota hai.
- **WAN (Wide Area Network):** Badi area mein, jaise internet.
- **MAN (Metropolitan Area Network):** Shehar ya city area ke andar.
- **PAN (Personal Area Network):** Personal devices ke beech, jaise Bluetooth.

3. Network Devices

- **Router:** Internet aur alag networks ko jodta hai.
- **Switch:** Network ke andar connected devices ko jodta hai.
- **Hub:** Basic device jo data broadcast karta hai sabhi devices ko.
- **Firewall:** Security device jo unauthorized access rokta hai.
- **Access Point:** Wired network ko wireless devices se connect karta hai.

4. Network Protocols

- **TCP/IP:** Data packets ko transfer karne ke rules.
- **HTTP/HTTPS:** Web pages ke liye communication protocol.
- **DNS:** Domains ko IP addresses mein convert karta hai.
- **FTP:** Files transfer ke liye protocol.
- **SMTP/POP3:** Email ke liye.

5. IP Addressing and Subnetting

- IP address har device ko unique pehchaan deta hai.
- Subnetting network ko chhote sub-networks mein divide karta hai taaki security aur management behtar ho.

6. Network Topologies

- **Bus:** Ek single cable se sab connected.
- **Ring:** Devices circular network mein connected.
- **Star:** Sab devices central switch/hub se connected.
- **Mesh:** Har device doosre devices se connected.

7. Bandwidth aur Transmission Media

- Bandwidth, network ki speed ya data transfer capacity ko kehte hain.
- Data transfer media mein cables (Ethernet, fiber optics) aur wireless (WiFi, Bluetooth) shamil hain.
- Transmission modes: Simplex, Half-duplex, Full-duplex.

8. Network Security

- Firewall network traffic ko control karta hai.
- VPN secure tunneling provide karta hai public networks ke liye.

9. OSI aur TCP/IP Models

- OSI model mein 7 layers hoti hain: Physical se lekar Application tak.
- TCP/IP model mein 4 layers hain, internet ka base hai.

Hacking Ke Important Topics

1. Hacking Kya Hai?

Hacking ka matlab hai system ya network ki security ko todna. Do tarah ka hacking hota hai: Ethical (legal) aur Black Hat (illegal).

2. Hacking Attacks Ki Types

- **Phishing:** Fake emails/messages se sensitive info nikalna.
- **SQL Injection:** Website ke database me code inject karna.
- **DDoS/DoS:** Server ko flood karke down karna.
- **Brute Force:** Password guess karna.
- **Fake WiFi (WAP):** Fake WiFi se data churaana.
- **Cookie Theft:** Browser cookies se session hijack karna.
- **Malware/Trojan:** Malicious software se system control karna.
- **Keylogger:** Keyboard ke input record karna.
- **Social Engineering:** Psychological tricks se info lena.
- **XSS (Cross-Site Scripting):** Malicious scripts inject karna website mein.
- **MITM (Man-in-the-Middle):** Communication intercept karna.
- **Ransomware:** Data encrypt karke ransom demand karna.

3. Tools Used for Hacking

- Nmap, Wireshark (network scanning/monitoring)
- Metasploit (exploitation)
- Aircrack-ng (WiFi hacking)
- John the Ripper, Hydra (password cracking)
- WiFi Pineapple (WiFi attacks)

4. Black Hat Hacker Ka Attack Process

- **Reconnaissance:** Information gather karna.
- **Scanning & Enumeration:** Vulnerabilities dhundhna.
- **Gaining Access:** Exploit karna.
- **Maintaining Access:** Backdoors install karna.
- **Covering Tracks:** Logs clear karna.

5. System Protection (Defense)

- Strong passwords use karein.
- Firewalls aur antivirus enable rakhein.
- Regular updates karein.
- Suspicious emails aur links na kholen.
- VPN use karein public WiFi par.

Important Note:

“Hacking ek art hai.” Is art ko kabhi illegal kaam ke liye use na karein. Sirf educational aur security improvement ke liye istemal karein.

Agar chahen to is content ko copy karke PDF bana sakte hain, ya aur detailed chapters banwane ke liye bata sakte hain.

Is tarah se sab topics achi tarah cover ho gaye hain, simple aur complete language mein.