1. What are the Different Types of Hacking Methods?

1. **Password Hacking**

    o   Guessing or stealing passwords

2. **Phishing**

    o   Tricking users via fake emails or websites

3. **Malware Attacks**

    o   Using viruses, worms, trojans

4. **Keylogging**

    o   Recording keystrokes to steal credentials

5. **Man-in-the-Middle (MITM)**

    o   Intercepting communication between two users

6. **SQL Injection**

    o   Attacking databases through input fields

7. **Denial of Service (DoS/DDoS)**

    o   Making systems unavailable by flooding traffic

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2. Explain Types of Password Attacks

1. **Brute Force Attack**

    o   Tries all possible password combinations

2. **Dictionary Attack**

    o   Uses common words and passwords list

3. **Credential Stuffing**

    o   Uses leaked username-password combinations

4. **Rainbow Table Attack**

    o   Uses precomputed password hashes

5. **Phishing Attack**

    o   Tricks users into revealing passwords

6. **Keylogging Attack**

    o   Records user keystrokes secretly

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3. Explain Password Cracking Tools (Theory Only)

pwdump7

- Extracts password hashes from Windows systems
- Used by security professionals for auditing
- **Risk:** Can be misused if unauthorized

Medusa

- Network login password testing tool
- Supports multiple protocols (FTP, SSH, HTTP)
- Used in **penetration testing**

Hydra

- Fast password testing tool
- Supports parallel login attempts
- Used **only with permission**

⚠️ *All these tools must be used only in ethical hacking labs.*

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4. Explain Types of Steganography (QuickStego & Echo)

Steganography

Technique of hiding data inside another file (image, audio, text).

Types

1. **Image Steganography**
   - Data hidden inside images
   - Example: **QuickStego**
2. **Audio Steganography**
   - Data hidden inside sound files
   - Example: **Echo hiding**

QuickStego

- Hides text inside image files
- Changes pixel values slightly

Echo Hiding

- Hides data using sound echo

- Human ear cannot detect it

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5. Practical on Key Logger Tool

❌ **I cannot help with performing or demonstrating keylogger tools.**

✅ **What you can write in exams instead:**

- A keylogger records keystrokes secretly
- Used by attackers to steal passwords
- Defended by:
    - Antivirus software
    - Anti-keylogging tools
    - On-screen keyboards
    - Behavioral monitoring

🧩 **MALWARE**

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1. Define Types of Viruses

1. **File Infector Virus**
    - Attaches to executable files

2. **Boot Sector Virus**
    - Infects system boot area

3. **Macro Virus**
    - Infects MS Word/Excel files

4. **Polymorphic Virus**
    - Changes code to avoid detection

5. **Resident Virus**
    - Stays in memory and infects files

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2. Create Virus using HTTP RAT Trojan Tool

❌ **I cannot assist with creating malware or RATs.**

✅ **Exam-safe explanation**

- A **Trojan** disguises itself as legitimate software

- **RAT (Remote Access Trojan)** allows attackers remote control

- Delivered via email attachments or downloads

- Prevented using:

    o Antivirus

    o Firewalls

    o User awareness

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3. Explain Any One Antivirus with Example

Example: Windows Defender Antivirus

Features:

- Real-time protection

- Malware detection

- Firewall integration

- Automatic updates

Example:
If a malicious file is downloaded, Windows Defender scans it and blocks execution automatically.

Other Antivirus Examples:

- Norton

- McAfee

- Kaspersky

- Quick Heal