

1. What are the advantages and disadvantages of hacking?

Advantages	Disadvantages
It can be used to foil security attacks	It creates massive security issues
To plug the bugs and loopholes	Get unauthorized system access
It helps to prevent data theft	Stealing private information
Hacking prevents malicious attacks	Violating privacy regulations

2. What is the difference between Asymmetric and Symmetric encryption?

Asymmetric encryption	Symmetric encryption
Asymmetric encryption uses different keys for encryption and decryption.	Symmetric encryption uses the same key for both encryption and decryption.
Asymmetric on the other hand is more secure but slow. Hence, a hybrid approach should be preferred.	Symmetric is usually much faster but the key needs to be transferred over an unencrypted channel.

3. How can you avoid ARP poisoning?

ARP poisoning is a type of network attack that can be resolved through these techniques:

Using Packet filtering: Packet filters can filter out & block packets with clashing source address data.

Keeping away from trust relationship: Organizations ought to develop a protocol that depends on trust relationship as little as they can.

Utilize ARP spoofing software: Some programs assess and certify information before it is transmitted and blocks any information that is spoofed.

4. What do you understand by footprinting in ethical hacking? What are the techniques utilized for foot printing?

Footprinting is nothing but accumulating and revealing as much as data about the target network before gaining access into any network.

Open Source Footprinting : It will search for the contact data of administrators that will be utilized for guessing password in Social Engineering

Network Enumeration : The hacker attempts to distinguish the domain names and the network blocks of the target network

Scanning : After the network is known, the second step is to spy the active IP addresses on the network. For distinguishing active IP addresses (ICMP) Internet Control Message Protocol is a functioning IP addresses

Stack Fingerprinting : the final stage of foot printing step can be performed, once the hosts and port have been mapped by examining the network, this is called Stack fingerprinting.

5. What do you mean by DOS (Denial of administration) assault? Explain. What are the regular types of DOS assault?

Denial of Service, is a malicious attack on network that is executed by flooding the system with useless traffic. Despite the fact that DOS does not cause any data breach or security breach, it can cost the site proprietor a lot of cash and time.

- Buffer Overflow Attacks
- SYN Attack
- Teardrop Attack
- Smurf Attack
- Viruses

6. What is Pharming and Defacement?

Pharming : In this strategy the attacker compromises the DNS (Domain Name System) servers or on the user PC with the goal that traffic is directed towards malicious site

Defacement : In this strategy the attacker replaces the firm's site with an alternate page. It contains the hacker's name, images and may even incorporate messages and background music.