

- **What happens when u put the internet wire in the pc and open browser to write google.com?**

OSI Model:

- 1- From Physical layer, send data on the physical wire.
- 2- From Data link layer, reads the MAC address from data packet.
- 3- From Network layer, reads the IP address from the packet.
- 4- From Transport layer, responsible for the transport protocol and err handling.
- 5- From Session layer, establishes connections between two hosts.
- 6- From Presentation layer, formats the data so that it can be viewed by user.
- 7- From Application layer, service that are used with user application.

explaining: once i put the cable on the pc , i got my MAC address, then i got my ip from the DHCP(dhcpDiscovery-dhcpOffer-dhcpReq-dhcpAck), then i go to google through the transport layer by using tcp and https(browser asks dns server about google ip - browser req secure https from web server - respond with ssl cert - send encrypted symmetric key with public key - decrypt with private key - communication)

- **What are routing protocols?**

OSPF, RIP, IGRP, EIGRP, BGP

- **What can you do with SMB?**

enumeration for shares files.

- **What is port 445,139?**

SMB

- **What is port 88?**

Kerberos

- **What can you do with SNMP[161 port]?**

check for configuration files , check if can change values may lead to RCE