Task -1

1 What is an open ports ?

* A ports actively listening for incoming connection.

2 How does nmap perform a tcp syn scan ?

* Send a syn packet – if syn – ack recieved – port is open .

3 what risks are associated with open ports ?

* Attackers can exploit services , brute force , or gain unauthorized access.

4 Explain the difference between tcp and udp scanning ?

* Tcp – connection – oriented , reliable
* Udp – connectionless , harder to detect often slower.

5 How can ports be secured ?

* Close unsused ports , use firewalls , restricted access , update services .

6 What is a firewall’s role regarding ports ?

* Controls traffic flow , blocks unwanted access.

7 What is a port scan and why do attackers perform it ?

* A method to find open services and potential vulnerabilities .

8 How does wires shark complement port scanning ?

* Let’s you analyze actally packets and corfirm what’s happening during a scan .