Code Alpha Project

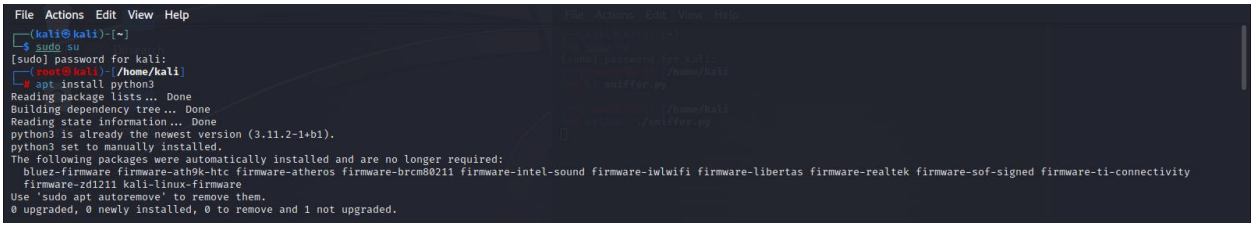
Task – 1

Basic Network Sniffer

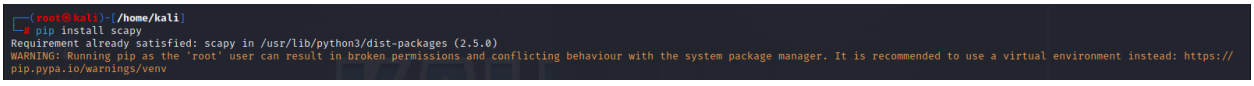
Creating a basic network sniffer in Python involves using a library like Scapy to capture and analyze network packets. This basic network sniffer captures IP packets and extracts information such as source and destination IP addresses, as well as protocol details. It also checks if the packet contains TCP or UDP information and prints the corresponding source and destination ports.

Keep in mind that building network tools should be done responsibly and in compliance with relevant laws and policies.

1. Command – apt install python3



2. Pip install scapy



3. Vi sniffer.py


1 2 3 4
20:57
root@kali: /home/kali
File Actions Edit View Help
┌──(root㉿kali)-[/home/kali]
└─# python3 ./sniffer.py
IP Source: 192.168.217.132, IP Destination: 192.168.217.2, Protocol: 17
UDP Source Port: 39670, UDP Destination Port: 53
IP Source: 192.168.217.132, IP Destination: 192.168.217.2, Protocol: 17
UDP Source Port: 39670, UDP Destination Port: 53
IP Source: 192.168.217.2, IP Destination: 192.168.217.132, Protocol: 17
UDP Source Port: 53, UDP Destination Port: 39670
IP Source: 192.168.217.2, IP Destination: 192.168.217.132, Protocol: 17
UDP Source Port: 53, UDP Destination Port: 39670
IP Source: 192.168.217.132, IP Destination: 142.250.183.3, Protocol: 17
UDP Source Port: 57183, UDP Destination Port: 443
IP Source: 142.250.183.3, IP Destination: 192.168.217.132, Protocol: 17
UDP Source Port: 443, UDP Destination Port: 57183
IP Source: 192.168.217.132, IP Destination: 142.250.183.3, Protocol: 17
UDP Source Port: 57183, UDP Destination Port: 443
IP Source: 192.168.217.132, IP Destination: 142.250.183.3, Protocol: 6
TCP Source Port: 39346, TCP Destination Port: 443