

Network_Packet_Analyzer.py x

```
1 import scapy.all as scapy
2
3 def packet_sniffer(interface):
4     try:
5         #Sniff packets on the specified interface
6         scapy.sniff(iface=interface, store=False, prn=process_packet)
7     except Exception as e:
8         print(f"Error: {str(e)}")
9
10 def process_packet(packet):
11     try:
12         #Extract relevant information from the packet
13         if packet.haslayer(scapy.IP):
14             source_ip = packet[scapy.IP].src
15             destination_ip = packet[scapy.IP].dst
16             protocol = packet[scapy.IP].proto
17             payload = packet[scapy.Raw].load if packet.haslayer(scapy.Raw) else None
18
19             print(f"Source IP: {source_ip}, Destination IP: {destination_ip}, Protocol: {protocol}, Payload: {payload}")
20     except Exception as e:
21         pass
22
23 def main():
24     interface = input("Enter the interface to sniff (e.g., 'eth0' or 'wlan0'): ")
25     print("Packet Sniffer started. press Ctrl+C to stop. ")
26     packet_sniffer(interface)
27
28 if __name__ == "__main__":
29     main()
```

Enter the interface to sniff (e.g., 'eth0' or 'wlan0'): Wi-Fi

Packet Sniffer started. Press Ctrl+C to stop.

Source IP: 192.168.12.204, Destination IP: 52.12.249.73, Protocol: 6, Payload: None

Source IP: 52.12.249.73, Destination IP: 192.168.12.204, Protocol: 6, Payload: None

Source IP: 192.168.12.204, Destination IP: 52.12.249.73, Protocol: 6, Payload: None

Source IP: 172.217.167.234, Destination IP: 192.168.12.204, Protocol: 6, Payload: None

Source IP: 172.217.167.234, Destination IP: 192.168.12.204, Protocol: 6, Payload: None

Source IP: 192.168.12.204, Destination IP: 192.168.12.49, Protocol: 17, Payload: None

Source IP: 192.168.12.204, Destination IP: 192.168.12.49, Protocol: 17, Payload: None

Source IP: 192.168.12.49, Destination IP: 192.168.12.204, Protocol: 17, Payload: None

Source IP: 192.168.12.49, Destination IP: 192.168.12.204, Protocol: 17, Payload: None