Exp. No: 14
Dt. 30.10.25

Packet Sniffing Using RAW Sockets

Aim:

To implement a packet sniffer using RAW sockets with python & scapy to capture & display IP packets along with their protocol type, source IP & destination IP

Code:

```
from scapy.all import sniff
from scapy.layers.inet import IP, TCP, UDP, ICMP
def Packet_callback(packet):
    If IP in Packet:
        ip_layer = packet[IP]
        protocol = ip_layer.proto
        src_ip = ip_layer.src
        dst_ip = ip_layer.dst
        if protocol == 1;
            Protocol_name = "ICMP"
        elif Protocol == 6:
            Protocol_name = "UDP"
        else:
            Protocol_name = "Unknown Protocol"
        print (f"Protocol : {protocol_name}")
        print (f"source IP: {src_ip}")
        print (f"Destination IP: {src_IP}")
        print ('-' * 50)
Sniff(iface = 'Wi-fi' prn = packet callback,
                        filter = "ip", store = 0)
```

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Result:

The packet sniffer successfully captured IP packets on the network, identifying their protocol type, sowrce IP & destination IP.