EXNO : 14

DATE : 22-10-24

PACKET SNIFFING

AIM:

→ Implement packet sniffing using RAW sockets

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

    protocol_name = ""
    if protocol == 1:
        protocol_name = "ICMP"
    elif protocol == 6:
        protocol_name = "TCP"
    elif protocol == 17:
        protocol_name = "UDP"
    else:
        protocol_name = "Unknown
                         Protocol"
```

```
print(f"Protocol: {protocol_name}")
print(f"Source IP: {src_ip}")
print(f"Destination IP: {dst_ip}")
print("-" * 50)

def main():
    sniff(iface='Wi-Fi', prn=packet_callback,
          filter="ip", store=0)

if __name__ == "__main__":
    main()
```

OUTPUT

```
Protocol: TCP
Source IP: 20.241.184.142
Destination IP: 172.20.10.2

Protocol: TCP
Source IP: 20.241.184.142
Dest IP: 172.20.241.184

Protocol: TCP
Source IP: 20.241.184.182
Dest IP: 172.20.10.2
```

Thus Packet Sniffing using RAW packets is successfully implemented