Ex.No 14

Aim:

write a code using Raw Sockets to implem Packet Sniffing

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)

    Protocal = IP-Laye. Proto

    Src-IP = ip-Layer.src

    dest-IP = IP-Layer. dst

Protocal-name =",

    if Protocal = 1';

        Protocolname = "ICMP"

    elif Protocal = =6';

        Protocol-name = "TCP"

    elif Protocol= =17

    Protocol-name = "UDP"
```

```
else
    protocol_name = "unknown protocol"
    print(f"protocol: {protocol_name}")
    print(f"Source IP: {source_ip}")
print(f"destination IP: {dest_ip}")
print("-" * 50)

def main
    sniff(iface="wifi", prn=packet_callback,
          filter="ip", store=0)

if __name__ == "__main__":
```

O/P:

```
protocol: TCP
Source IP: 51.132.193.105
destination IP: 192.161.34.193
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protocol: TCP
Source IP: 198.165.34.193
destination IP: 51.132.193.105
```

Result:

Thus implementation of Packet sniffing is done using Raw Sockets.

2024