DATE: 8/11/24

EX.NO: 14

PACKET SNIFFING

AIM:

To implement a code using RAW sockets to implement Packet sniffing.

SOURCE 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 == 7:
            protocol_name = "Unknown protocol"
        else:
            protocol_name = "Unknown protocol"
        print(f"protocol: {protocol_name}")
        print(f"Source IP: {src_ip}")
        print(f"Destination IP: {dst_ip}")
        print("-"*60)
```

```
def main():
    sniff(if="wifi", prn=packet_callback, filter=
                                    "ip", store=0)
if __name__ == "__main__":
    main()
```

OUTPUT:

Protocol : TCP
Source IP : 20.247.184.142
Destination IP: 172.20.10.2

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Source IP : 20.247.184.142
Destination IP: 172.20.10.2

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~~Prot~~

Protocol : TCP
Source IP : 172.20.10.2
Destination IP : 20.247.184.142

RESULT :

Thus the packet sniffing Program was executed successfully and the output is verified.

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