PRACTICAL - 14

AIM :-

Write a code using RAW sockets to implement packet sniffing.

ALGORITHM :-

```
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.src
        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)

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

OUTPUT :-

Protocol : TCP
Source IP : 192.168.1.5
Destination IP : 142.250.183.110

Protocol : UDP
Source IP : 192.168.1.5
Destination IP : 8.8.8.8

Protocol : ICMP
Source IP : 192.168.1.5
Destination IP : 192.168.1.1

Protocol : TCP
Source IP : 192.168.1.10
Destination IP : 172.217.166.46

RESULT:-

Thus the above code is executed successfully