Ex NO: 12 USING RAW SOCKETS TO IMPLEMENT
DATE: 30.09.25 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.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)
sniff(iface='wi-fi', prn=packet_callback, filter="ip", store=0)
```

Output :

Protocol: TCP

Source IP : 192.168.0.108

Destination IP : 4.225.11.192

Protocol: UDP

Source IP : 192.168.0.108

Destination IP : 52.178.1.64

Result :

The program has been executed successfully.

23/09/26