Exp24 Implementation of packet sniffing using RAW sockets.

Aim:-

To implement packet sniffing using RAW sockets.

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)
```

Sample Input:

Step 1:- open a web browser and visit. https://www.google.com

Step 2: run the command 8.8.8.8. ping in another terminal.

Sample output:-

Protocol: TCP

Source IP: 192.168.1.5

Destination IP- 142.250.183.110

Result :- Hence the exporment on the implementation if packet sniffering using RAW sockets has been executed. Sucessfully.