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AIM: To implement a code using RAW sockets to implement packet sniffing

Program:

```
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("-" * 30)

def main():
    sniff(iface='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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Result:

Thus the packet Sniffing program was executed Successfully and the output is verified.