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PRACTICAL - 14

AIM:

To write 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("-" * 50)

def main():
    sniff(iface='wi-fi', prn=packet_callback, filter="ip", store=0)
```

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```
if __name__ == "__main__":
    main()
```

OUTPUT:

Protocol : TCP

Source ip : 20.247.164.172

Destination IP : 172.20.10.2

~~Protocol~~ : ~~TCP~~

RESULT:

Thus packet sniffing process is successfully executed and output is verified.