Exp 14

AIM :-

To write a code using RAW Socket 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.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"SourceIP: {src_ip}")
        print("-" * 50)
def main():
    sniff(iface = "wifi", prn = packet_callback,
filter = "ip", store = 0)
```

if __name__ == "__main__"

main

OUTPUT :-

Practical : TCP

Source IP : 20.241.164.172

Destination IP : 172. 20.10.2

RESULT :-

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