Exp: 14 Packet Sniffing

Aim: Write a code using Raw Sockets to implement Packet Sniffing

```
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

    #Determine the protocol.
    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 packet
    print(f"Protocol : {protocol_name}")
    print(f"Source IP : {src_ip}")
    printf("Destination IP : {dst_ip}")
    print("_" * 50)
def main()
    sniff(iface = "wi-fi", prn = packet_callback, filter =
        "ip", store = 0)
    if name == "main":
```

main()

Output: Protocol : TCP
Source IP : 20.247.164.142
Destination : 172.20.10.2

Result: Thus, the program is executed Successfully.