Exp.no: 14

Date: 30/10/24

Raw Packets of Packet sniffing

Aim:

To implement a code using RAW sockets to implement packet sniffing.

Code:

```
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("protocol: {protocol_name}")
print("source IP : {src_ip}")
print("Destination ip : {dst_ip}")
print("_" * 50)
def main():
    sniff(iface="Wi-Fi",
          prn=packet_callback,
          filter="ip", store=0)
if __name__ == "__main__":
    main()
```

O/P

```
protocol: TCP
source IP: 20.247.184.142
DestinationIP: 172.20.10.2
protocol: TCP
source IP: 20.247.184.142
Destination IP: 172.20.10.2
protocol: TCP
source IP: 172.20.10.2
Destination IP: 20.247.184.142
```

protocol: TCP

source IP: 172.20.10.2

Destination IP: 20.247.184.142

Result:

Thus the packet sniffing program was executed successfully and O/P is verified.