Ex: No: 14   Packet Sniffing

Date:- 29/10/24

Aim:-

Write To implement packet sniffing any RAW
Socket

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"
```

```python
    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)

if __name__ == "__main__":

    main ()
```

Output:-

Protocol : TCP

Source IP: 20.247.184.142

Destination: 172.2010.2

Result:-

This the program was successfully executed
and the Output is verified.