Ex No 14

Date 6/11/24

Practical - 14

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
        dest_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 = 'wifi', prn = packet_callback, filter
    "ip", store = 0)

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

output:

protocol : TCP

Source IP : 20.247.124.142

Destination IP : 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.

Result:

Thus the program is successfully executed & the output is verified.