12/10/25

Experiment 14

Packet sniffing

Aim:

To write 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(f"Protocol : {protocol_name}")
print(f"source IP : {src_ip}")
print(f"Destination IP : {dst_ip}")
print("",50).
sniff(iface='Wi-Fi', Prn = Packet - callback,
                     filter="ip", store=0)
```

output

Protocol : TCP
Source IP : 192.168.1.10
Destination IP : 172.217.167.78

Protocol : UDP
Source IP : 192.168.1.10
Destination IP : 8.8.8.8

Protocol : ICMP
Source IP : 192.168.1.10
Destination IP : 192.168.1.1

Result : Thus code is written using RAW socket to implement packet sniffing.