EXP. 14
Date:

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}")
```

printf("Destination IP : %d.%d.%d.%d", fdst.ip[0], fdst.ip[1], fdst.ip[2], fdst.ip[3])

sniff(iface='Wi-Fi', prn=packet_callback, store=0)

Output:

Protocol: UDP

Source IP: 192.168.157.138

Destination IP: 192.168.157.255

Result:

Thus the program was successfully executed and the output was verified.

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