

Date / /

practical - 14

Aim: write a code using RAW Sockets to  
Implement packet sniffing.

Program:

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.protocol  
        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(interface="wi-fi", prn=packet_callback,  
       filter="ip",  
       store=0)
```

```
1 from scapy.all import sniff
2 from scapy.layers.inet import IP, TCP, UDP, ICMP
3
```

>>> Run exp14.py

Protocol: UDP  
Source IP: 192.168.157.130  
Destination IP: 192.168.157.255

Protocol: TCP  
Source IP: 20.50.90.213  
Destination IP: 192.168.157.130

Protocol: TCP  
Source IP: 13.126.70.76  
Destination IP: 192.168.157.130

Protocol: TCP  
Source IP: 192.168.157.130  
Destination IP: 13.126.70.76

Protocol: UDP  
Source IP: 192.168.157.130  
Destination IP: 192.168.157.255

Protocol: UDP  
Source IP: 192.168.157.130  
Destination IP: 192.168.157.255

Protocol: UDP  
Source IP: 192.168.157.130  
Destination IP: 192.168.157.255

Protocol: UDP  
Source IP: 192.168.157.130  
Destination IP: 192.168.157.177

Protocol: UDP  
Source IP: 192.168.157.130  
Destination IP: 192.168.157.177

Protocol: UDP  
Source IP: 192.168.157.130  
Destination IP: 192.168.157.177

Protocol: TCP  
Source IP: 40.79.150.120  
Destination IP: 192.168.157.130

Type here to search

32°C Haze

output:

Result:

Thus the program is successfully executed and output is verified.