

Ex. No: 14

Practical - 14

Date:

Aim:

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  
        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: {source_ip}")
```

```
print (f"destination IP: {dest-IP}")
```

```
print ("-" * 50)
```

```
if __name__ == "__main__":
```

```
    sniffer (iface = 'Wi-Fi', pm = packet_callback,
```

```
            filter = "IP", store = 0)
```

```
main()
```

O/p:

Protocol: TCP

source IP: 51.132.193.105

destination IP: 192.168.34.193

Protocol: TCP

source IP: 198.168.34.193

destination IP: 51.132.193.105

Result:

This implementation of packet sniffing  
is done using Raw sockets.