

AIM:

To write code using RAW Sockets to implement Packet Sniffing.

ALGORITHM:

- Start sniffing: capture Packets on specified network interface.
- Check packet types for each packet check if it's IP Packets.
- Display
- Repeat first initial scan
- PIP Install Scapy

CODE:

```

Packet - Sniffer . Py
from scapy.all import sniff
from scapy.layers.net import IP, TCP, UDP, ICMP
def Packet_callback (Packet):
    if IP in 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}")
```

```
    print(f"Protocol: source IP: {src.p}")
```

```
    print(f"destination IP: {dst.p}")
```

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

```
def main():
```

```
    Sniff (if ace = 'wifi', Prn = Packet_callback,  
          filter = 'IP', store=0)
```

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

OUTPUT:

Protocol : TCP

Source IP: 51.132.193.105

Destination IP: 192.168.34.193

Protocol : TCP

Source IP: 192.168.34.193

Destination IP: 51.132.193.105

RESULT:

~~Thus~~ Thus implementation of packet sniffer is done with RAW Sockets successfully.

OK