

ExNo: 14

Using raw sockets to implement  
Packet sniffing.

Date: 6/10/25

Algorithm:

```
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(face='wifi', prn=packet_callback,  
      filter="ip", store=0)
```



output:

Protocol : TCP

Source IP : 192.168.0.108

Destination IP : 4.225.11.192


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Protocol : UDP

Source IP : 192.168.0.108

Destination IP : 54.178.1.64.

Result:

  
The program has been executed  
successfully.