

Date: 09/10/25

~~Practical~~ practical-14

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:
```

```
        src_ip = packet [IP].src
```

```
        dst_ip = packet [IP].dst
```

```
    if TCP in packet:
```

```
        src_port = packet [TCP].sport
```

```
        dst_port = packet [TCP].dport
```

```
        print (f"TCP packet: {src_ip}: {src_port} → {dst_ip}: {dst_port}")
```

```
    elif UDP in packet:
```

```
        src_port = packet [UDP].sport
```

```
        dst_port = packet [UDP].dport
```

```
        print (f"UDP packet: {src_ip}: {src_port} ---> {dst_ip}: {dst_port}")
```

```
    elif ICMP in packet:
```

```
        print (f"ICMP packet: {src_ip} → {dst_ip}")
```

```
    else:
```

```
        print (f"IP packet: {src_ip} → {dst_ip}")
```



```
print("starting network sniffer.")
```

```
sniff(prn= packet_callback, filter="ip", store=False
```

Result: Hence packet sniffing was executed successfully using RAW socket code.