

packet sniffing

Aim
write a code using Scapy sockets to
implement Packet Sniffing.

```
from Scapy.all import sniff  
from Scapy.layers.inet import IP, ICMP
```

```
def packet_callback(packet):
```

```
    if IP in packet:
```

```
        IP_layer = packet[IP]
```

```
        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: { Src_IP }")
```

```
Print (f "Destination IP: { Dest_IP }")
```

```
Print (f " - " * 50)
```

```
def main ():
```

```
    Shift (face = "Wi-Fi", rx = packet_callback  
           filter = "ip", store = 0)
```

```
    if __name__ == "__main__":  
        main ()
```

Output:

Protocol: Tcp

Source IP: 20.247.164.142

Destination IP: 172.20.10.2

Protocol: Tcp

Source IP: 20.247.164.142

Destination: IP: 172.20.10.2

Result:

Thus the packet sniffing program is
successfully executed