

Exp: 14

- Packet Sniffing

Date: 29/10/24

Aim

To write code using Raw Sockets to implement packet sniffing

Algorithm

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 (" Protocol : { Protocol }")
Print (" Source IP : { Src - IP }")
Print (" Destination IP : { dst. IP }")
Print (" - " * 50)

def main():
    Sniff (face = "wifi", Prtn = packet = callback,
           filter = 'P'; Store = 0)
    if __name__ == '__main__':
        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 implementation of packet
Sniffing is done using raw sockets.

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