26/11/24

EXP.NO:10

Page 47

Packet Sniffing

AIM:

To write a code using RFIB socket to implement packet sniffing

PROGRAM:

```
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
    # Determine the protocol
        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 Packet details.
    Print(f"Protocol: {protocol_name}")
    Print(f"Source IP: {src_ip}")
    Print(f"Source IP: {dst_ip}")
Print("_" * 50)
```

```
def main()
Sniff (if ace = "wifi", pam = Packet = callback,
        filter = "IP", stor = 0)
if - name - = = = "- main-"
    main ()
```

O/P:

Protocol : TCP
Source IP: 20.247.164.170
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 process is executed & output is verified successfully

23/11