Packet Switching

AIM

to work a Code using d RAW sockets
to implement packet sniffing

Program:

```
form scapy.all import sniff
form scapy.layers.inet import IP, TCP,
                            UDP, ICMP

def packet_callback(packet):
    If IP in packet
        ip_layer = packet[IP]
        protocol = ip_layer.protocol
        src_ip = ip_layer.src
        dst_ip = ip_layer.dst

    # Determine the protocol
    protocol_name = ""
    if protocol == 1:
        Protocol_name = "ICMP"

    elif protocol == 17:
        Protocol_name = "UDP"
    else: protocol_name = "Unknown protocol"
```

```python
# print packet details
    printf(f" Protocol: {protocol-name}")
    printf(f" Source IP : {src_ip})
    printf(f" Destination IP : {dst_ip})
    print("_" * 50)


def main():

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

O/P:

Protocol: TCP
Source IP: 20.247.66.142
Protocol: TCP
Source IP: 20.247.66.166

Result:

The program was successfully executed
and o/p is verified