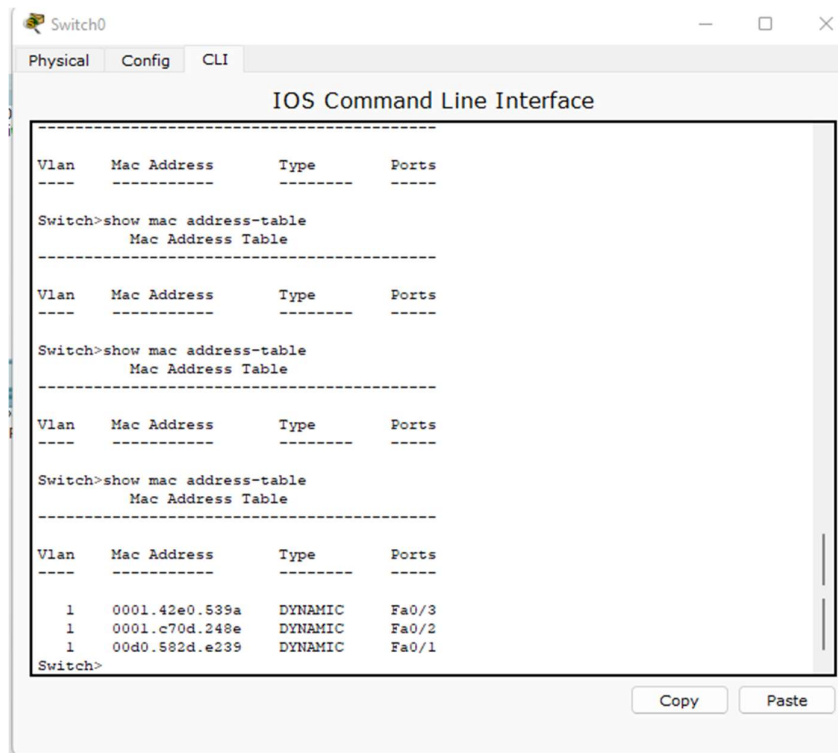# LAB-6(23-08-2023)
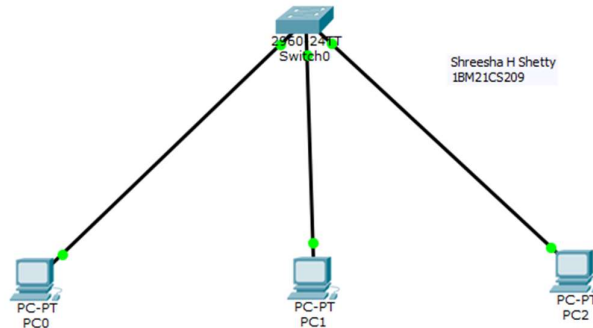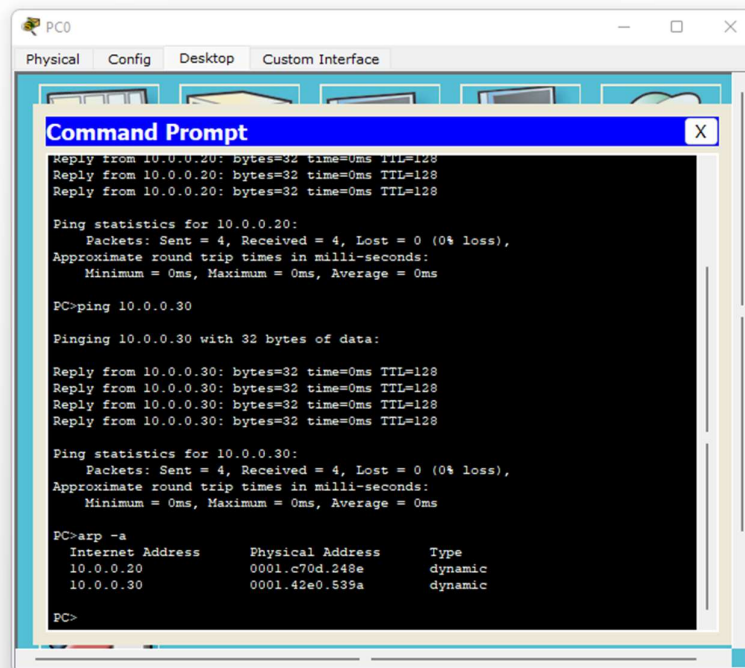
-1BM21CS209

8.To construct simple LAN and understand the concept and operation of Address Resolution Protocol.

PC0 — □ ✕

Physical | Config | **Desktop** | Custom Interface

Command Prompt [X]

```
Reply from 10.0.0.20: bytes=32 time=0ms TTL=128
Reply from 10.0.0.20: bytes=32 time=0ms TTL=128
Reply from 10.0.0.20: bytes=32 time=0ms TTL=128

Ping statistics for 10.0.0.20:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>ping 10.0.0.30

Pinging 10.0.0.30 with 32 bytes of data:

Reply from 10.0.0.30: bytes=32 time=0ms TTL=128
Reply from 10.0.0.30: bytes=32 time=0ms TTL=128
Reply from 10.0.0.30: bytes=32 time=0ms TTL=128
Reply from 10.0.0.30: bytes=32 time=0ms TTL=128

Ping statistics for 10.0.0.30:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>arp -a
  Internet Address      Physical Address      Type
  10.0.0.20             0001.c70d.248e        dynamic
  10.0.0.30             0001.42e0.539a        dynamic

PC>
```
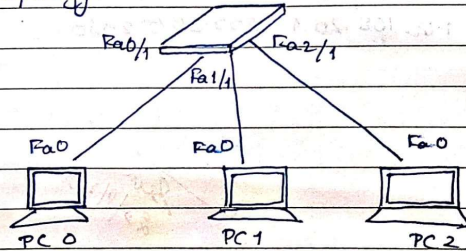
8. To construct simple LAN and understand the concept and operation of Address Resolution Protocol [ARP].

→

Topology:

Procedure :

1. Connect topology as shown above

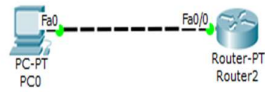2. Assign ip address to all end devices

Commands in Grouter - CLI of router

\# config terminal

\# interface fastEthernet 0/0.1

\# encapsulation dot1q20

\# ip address 192.168.20.1 255.255.255.0

\# no shut

\# exit

9.Telenet


```
Command Prompt

Packet Tracer PC Command Line 1.0
PC>ping 10.0.0.2

Pinging 10.0.0.2 with 32 bytes of data:

Reply from 10.0.0.2: bytes=32 time=0ms TTL=255
Reply from 10.0.0.2: bytes=32 time=1ms TTL=255
Reply from 10.0.0.2: bytes=32 time=0ms TTL=255
Reply from 10.0.0.2: bytes=32 time=0ms TTL=255

Ping statistics for 10.0.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC>telnet 10.0.0.2
Trying 10.0.0.2 ...Open

User Access Verification

Password:
Password:
r1>enable
Password:
r1#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

C    10.0.0.0/8 is directly connected, FastEthernet0/0
r1#
```
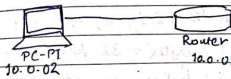
9Q. TELGNET:

→ Topology :

PC-PT   Router
10.0.02   1a0.01

```
# enable
# config t
# hostname r1
# enable secret p1
# interface fast Ethernet 0/0
# ip address 10.0.0.1  255.0.0.0
# no shut
# line vty 05
# login
% login disabled on line 132, until 'password' is set
% login disabled on line 133, until 'password' is set
% login disabled on line 134, until 'password' is set
% login disabled on line 135, until 'password' is set
% login disabled on line 136, until 'password' is set
% login disabled on line 137, until 'password' is set
# password p0
# exit
```

Result:

PC> ping   192.168.20.3

Pinging 192.168.20.3: bytes : 32 bytes of data

Reply from 192.168.20.3 bytes : 32 bg time = 1m   TTL-128

Reply from 192.168.20.3 bytes:32 time =0ms   TTL-128

Reply from 192.168.20.3 bytes: 32 time = 0ms TTL-128

Reply from 192.168.20.3 bytes: 32 time = 0ms TTL-128

Ping statistics for 192.168.820.3
Packets sent=4 Received = 4 Lost = 0
Approximate round trip times in milliseconds
minimum =0ms   Maximum = 1ms, Average = 0ms