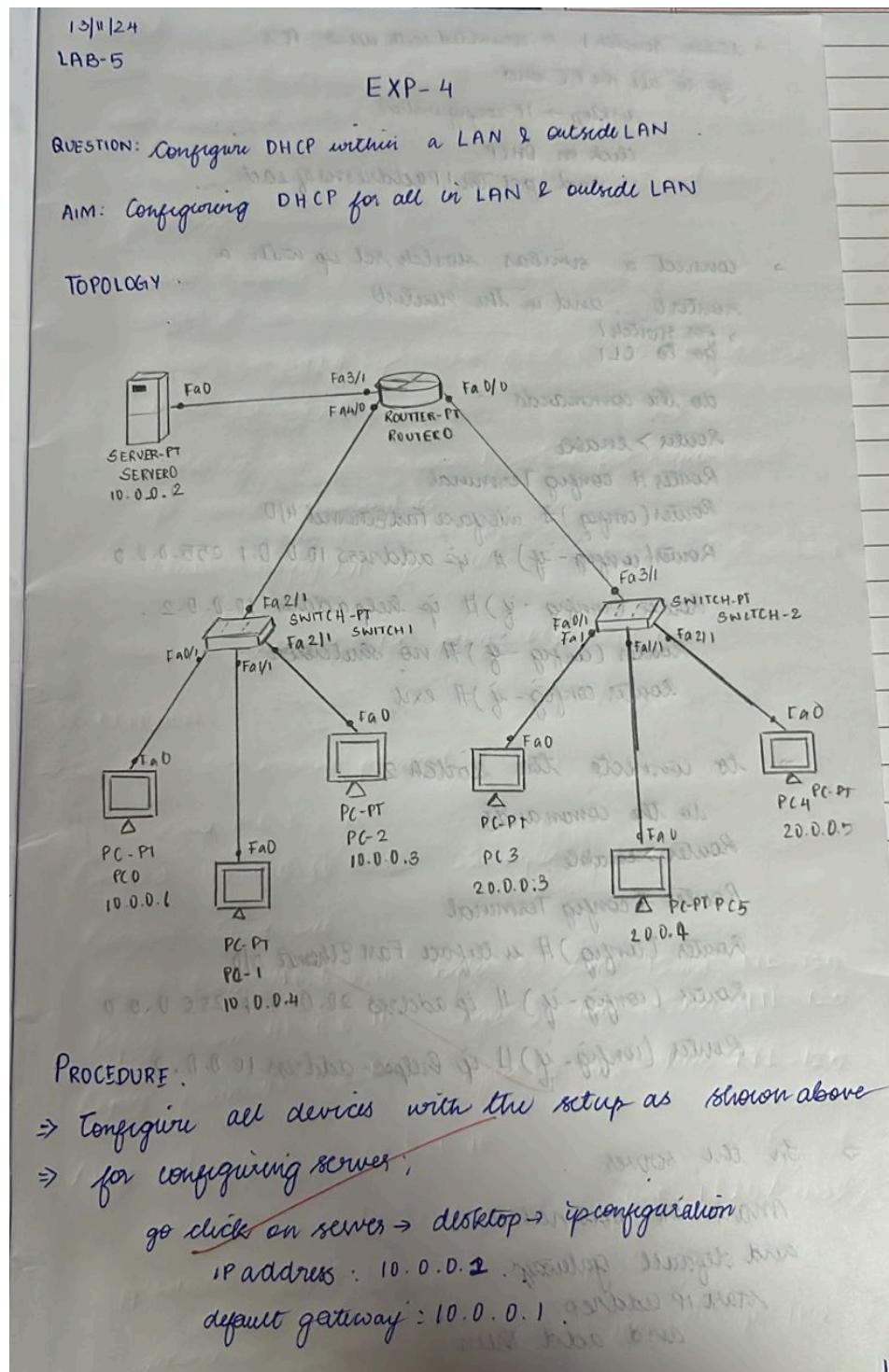


EXP-4

OBSERVATION



→ when switch 1 is connected with all 3 PC's
go to all the PC and
desktop → IP configuration
click on DHCP
and get the IP addresses of each

→ connect a similar switch set up with a
router 0 and in the router
→ for switch 1
go to CLI

do the commands

Router > enable

Router # config Terminal

Router (config) # interface Fast Ethernet 4/0

Router (config-if) # ip address 10.0.0.1 255.0.0.0

Router (config-if) # ip helper address 10.0.0.2

Router (config-if) # no shutdown

Router config-if) # exit

→ to connect the switch 2

do the commands

Router > enable

Router # config Terminal

Router (config) # interface Fast Ethernet 0/0

Router (config-if) # ip address 20.0.0.1 255.0.0.0

Router (config-if) # ip helper-address 10.0.0.2

⇒ In the server

Mark the pool names

and default gateways

start IP address

and add them

Observation :

in PC 0 , Command prompt

PC > ping 10.0.0.1 with 32 bytes = 32 time = 0ms TTL=128

.....
.....
.....

Packets sent = 4 , Received = 4 , Lost = 0

PC > arp ping 20.0.0.3

Pinging 20.0.0.3 with 32 bytes of data

Request Timed Out

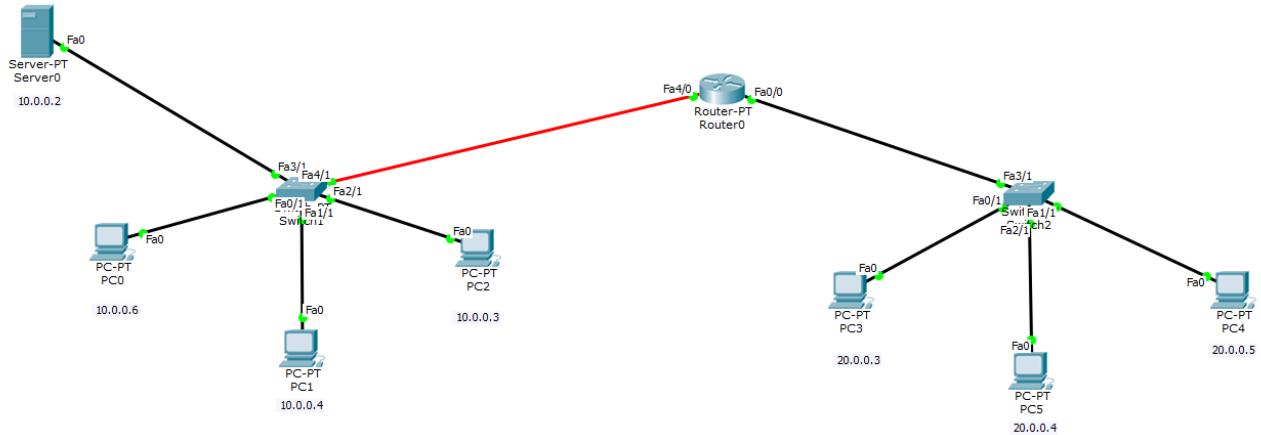
pinging 10.0.0.4 : byte = 32 time = 1ms TTL = 128

.....
.....
.....

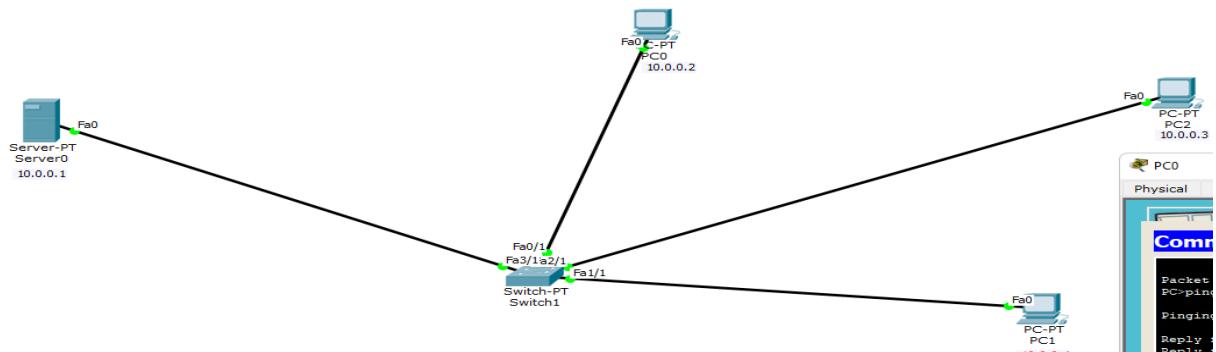
Packets sent = 4 Received = 3 , lost = 1

Qf the
13/11/24

TOPOLOGY



OUTPUT



```

PC0
Physical Config Desktop Custom Interface
Command Prompt X
Packet Trace PC Command Line 1.0
PC>ping 10.0.0.1
Pinging 10.0.0.1 with 32 bytes of data:
Reply from 10.0.0.1: bytes=32 time=0ms TTL=128

Ping statistics for 10.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 3ms, Average = 0ms

PC>ping 10.0.0.4
Pinging 10.0.0.4 with 32 bytes of data:
Reply from 10.0.0.4: bytes=32 time=0ms TTL=128

Ping statistics for 10.0.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC0
Physical Config Desktop Custom Interface
Command Prompt X
PC>ping 10.0.0.1
Pinging 10.0.0.1 with 32 bytes of data:
Reply from 10.0.0.1: bytes=32 time=0ms TTL=128

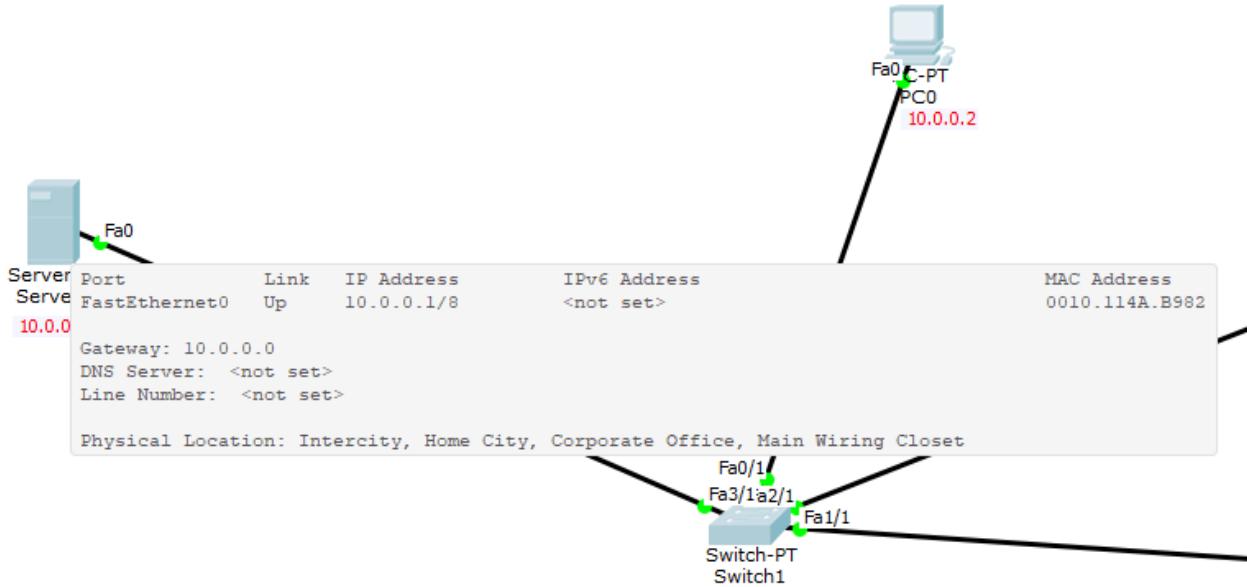
Ping statistics for 10.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 3ms, Average = 0ms

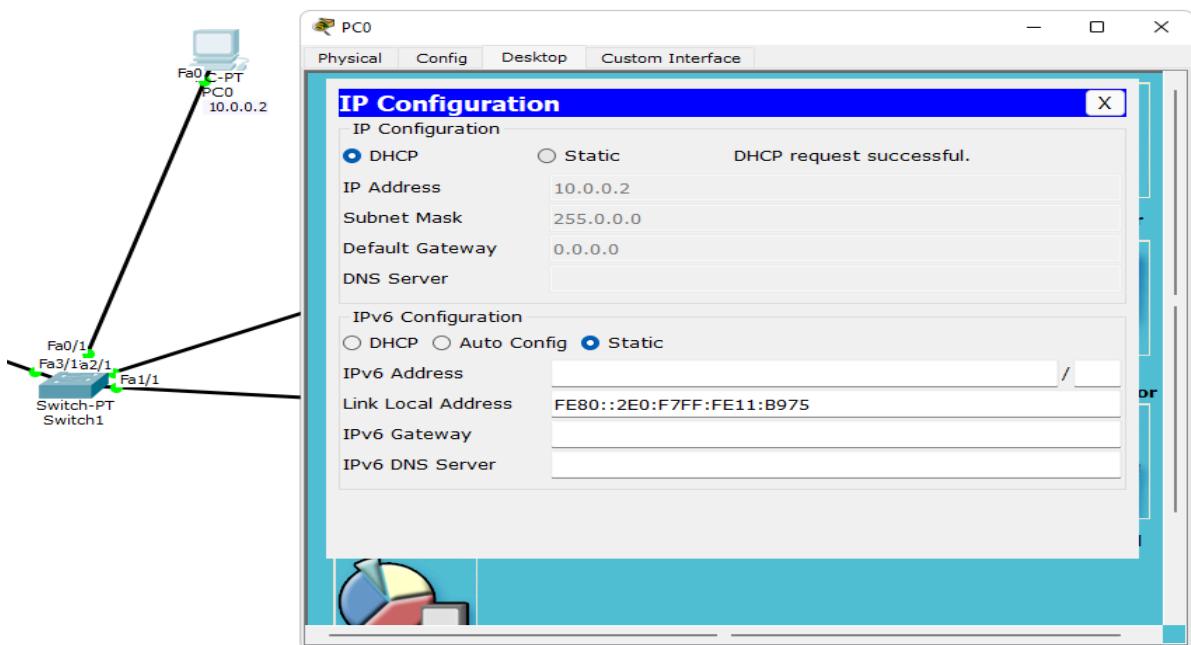
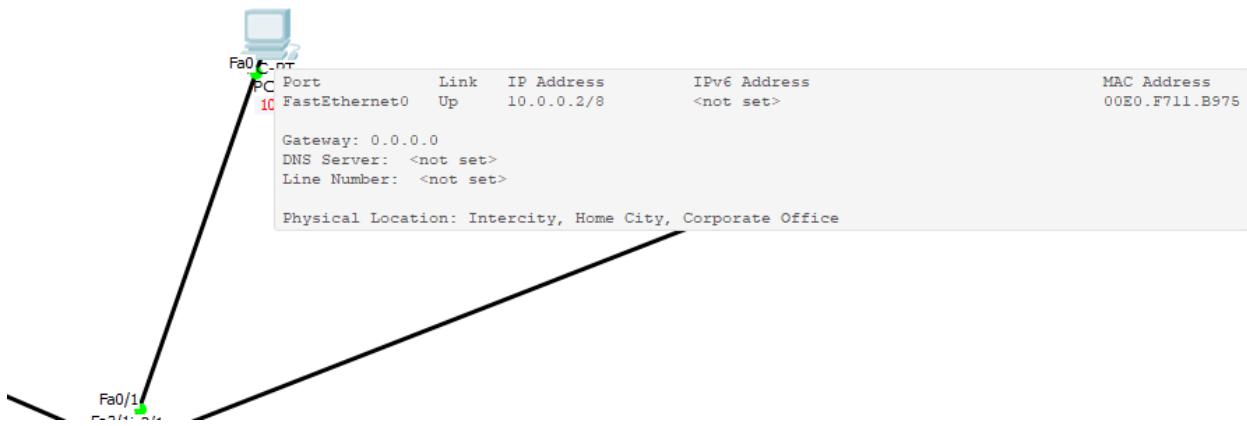
PC>ping 10.0.0.4
Pinging 10.0.0.4 with 32 bytes of data:
Reply from 10.0.0.4: bytes=32 time=0ms TTL=128

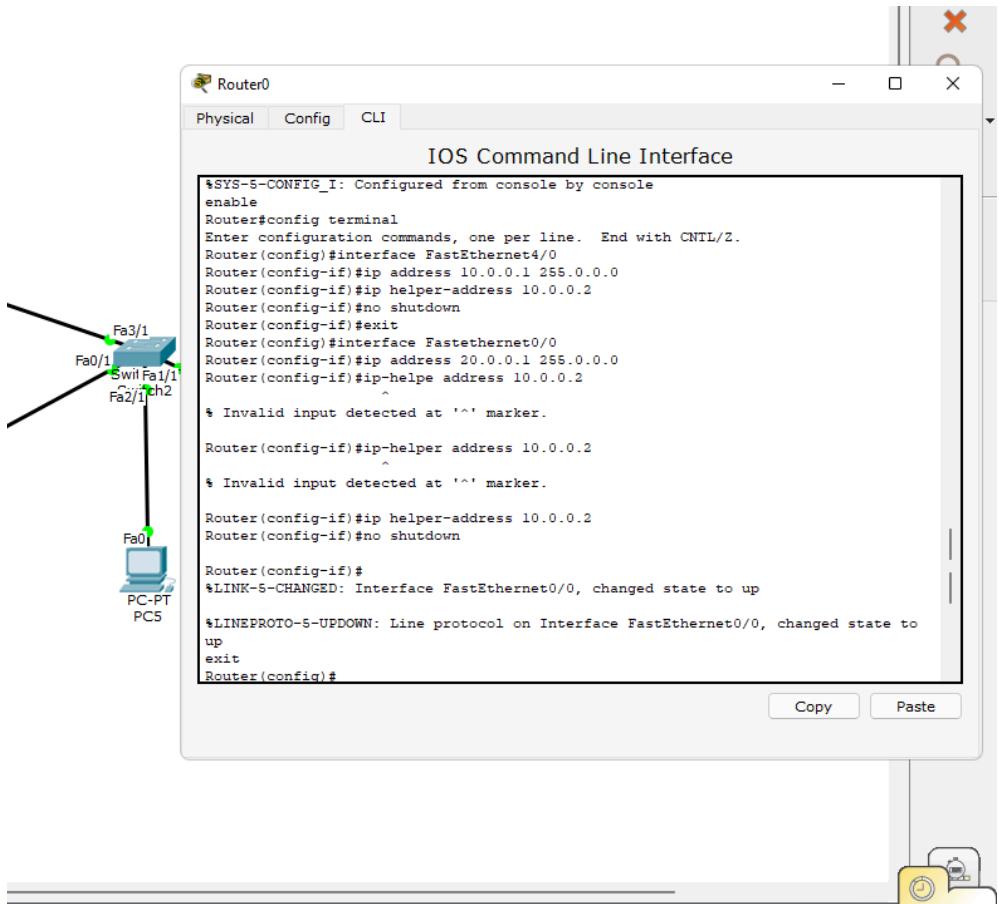
Ping statistics for 10.0.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

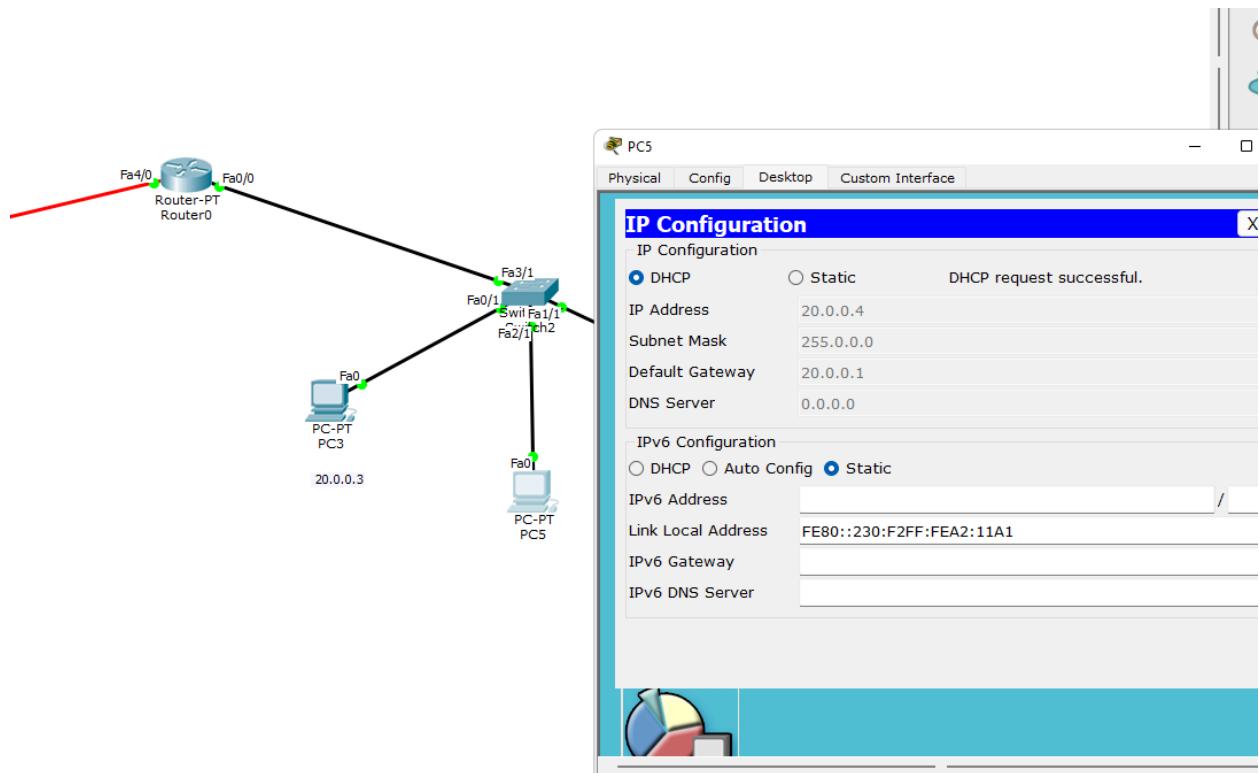
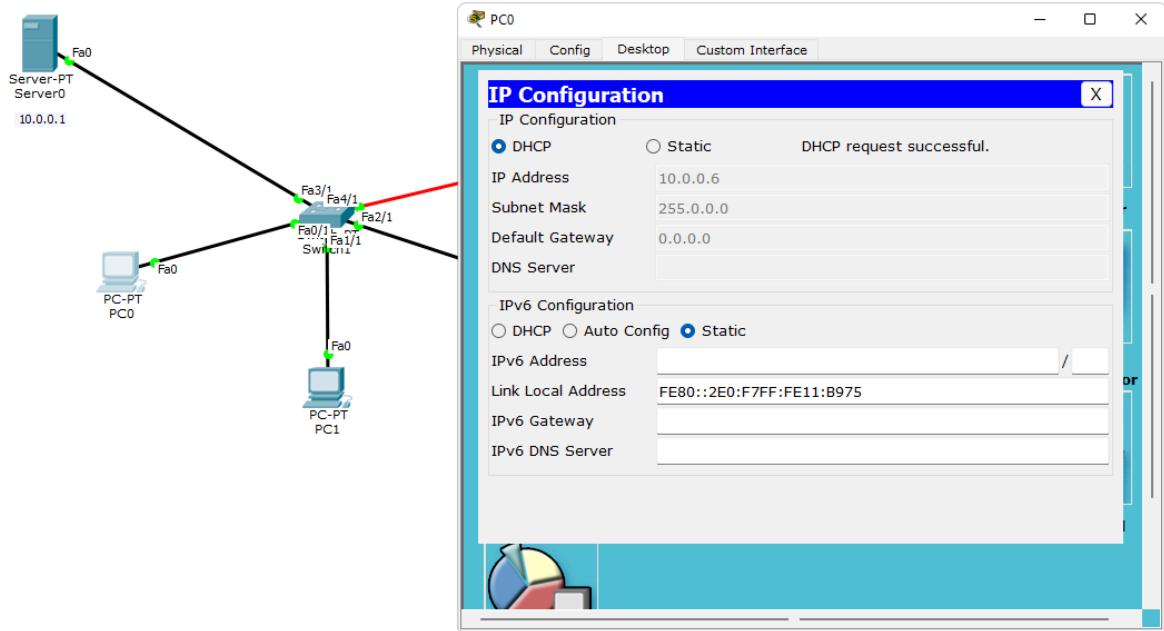
PC>

```









PC0

Physical Config Desktop Custom Interface

Command Prompt

```
Minimum = 0ms, Maximum = 3ms, Average = 0ms

PC>ping 10.0.0.4

Pinging 10.0.0.4 with 32 bytes of data:

Reply from 10.0.0.4: bytes=32 time=1ms TTL=128
Reply from 10.0.0.4: bytes=32 time=0ms TTL=128
Reply from 10.0.0.4: bytes=32 time=0ms TTL=128
Reply from 10.0.0.4: bytes=32 time=0ms TTL=128

Ping statistics for 10.0.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC>ping 20.0.0.3

Pinging 20.0.0.3 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 20.0.0.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
PC>
```