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Batch: 03

EXPERIMENT: 05

● **Aim:** Number of Nodes and Physical Layer Configuration Using Packet Tracer In Ubuntu.

● **Theory:**

Step 01: -

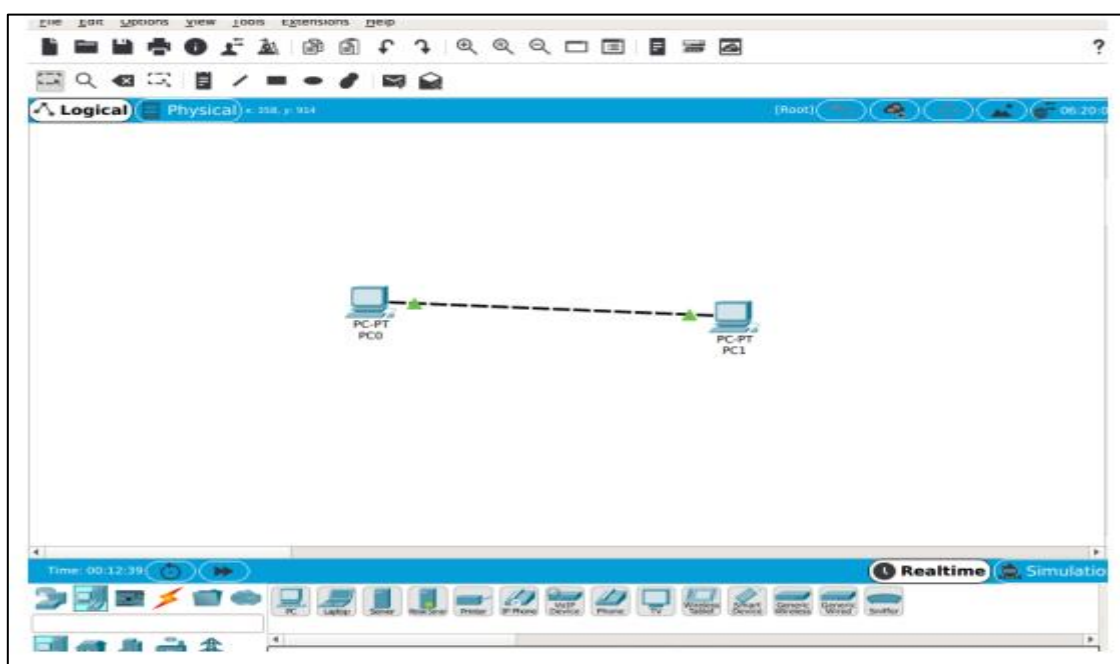
Open your Network Topology.

Once you've opened your Network Topology on Cisco Packet Tracer, access your network and identify the components of your network, for example; Servers, Routers, End Devices, etc.

Step 02: -

Complete the cabling.

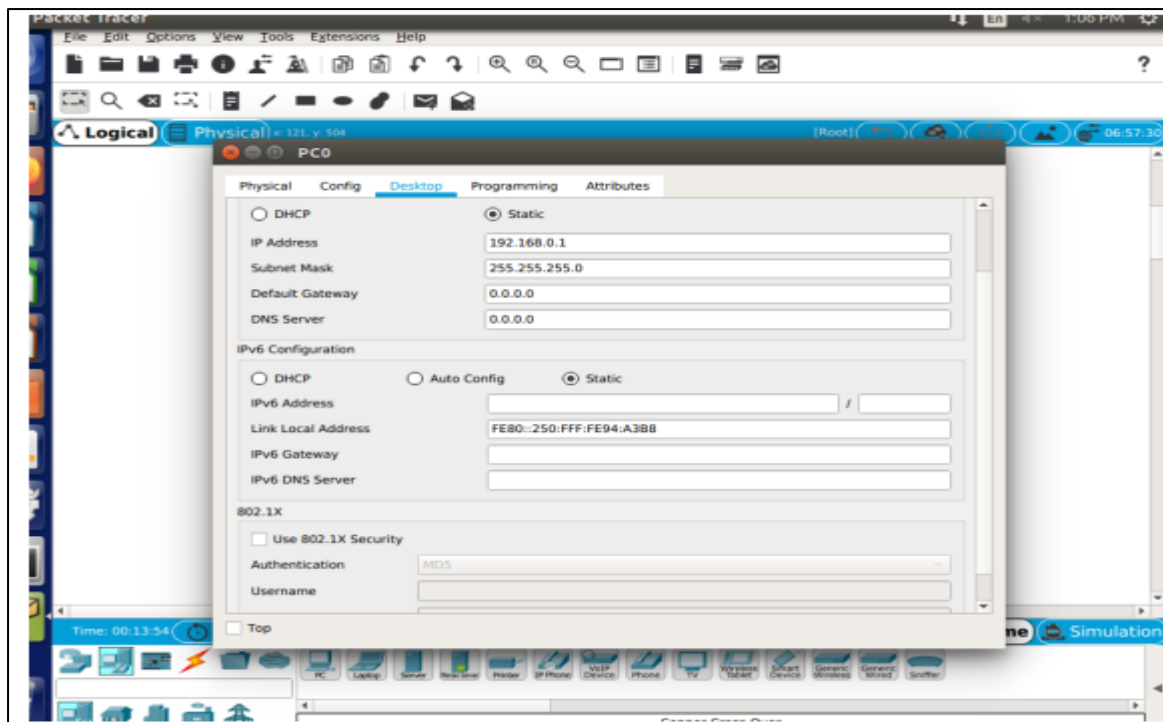
Access the cables section and connect completely and correctly the cables between the network in order to ensure connectivity between the devices in the network using the connections table given.



Step 03: -

Configure the IP addresses on the end devices.

Using the address table still, correctly and completely configure the IP addresses on all end devices. This can be done by accessing the desktop platform on each device and locating the IP configuration section. The reason for doing this is to enable the devices be on the right network.



Step 04: -

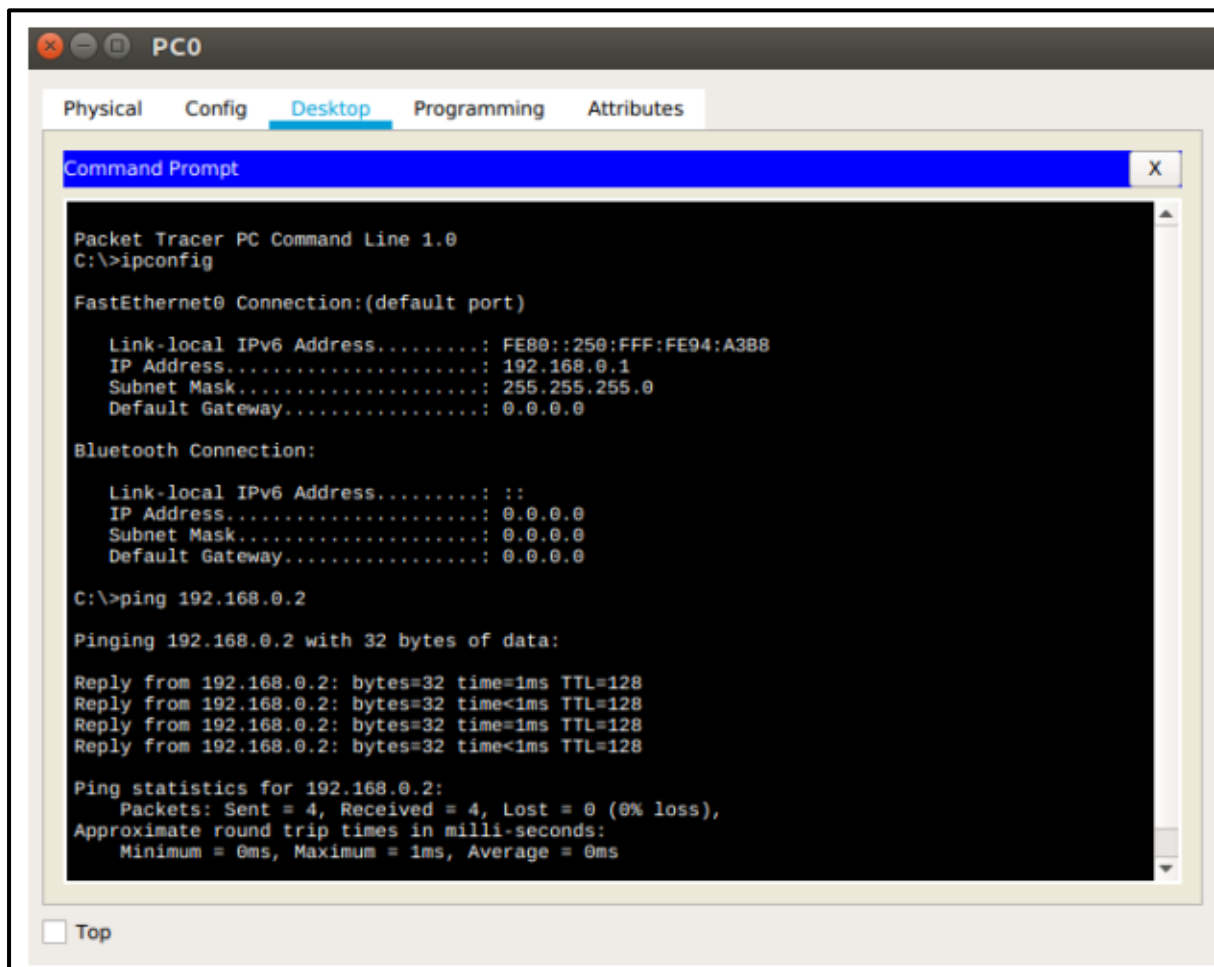
Configure your default gateway:

After configuring the IP addresses, you will need to configure the default gateway also. The reason for this is so the end devices would know what network they are operating on. You can find the default gateway either in the addressing table (if given) or in the network topology.

Step 05: -

Test connectivity.

After configuring the addresses, you will have to test connectivity by opening a command prompt window on the end devices and try pinging the address which the network operates on. If it gives you a reply, it means your network was configured correctly.



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PC0
Physical Config Desktop Programming Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
C:\>ipconfig

FastEthernet0 Connection:(default port)

Link-local IPv6 Address.....: FE80::250:FFF:FE94:A3B8
IP Address.....: 192.168.0.1
Subnet Mask.....: 255.255.255.0
Default Gateway.....: 0.0.0.0

Bluetooth Connection:

Link-local IPv6 Address.....: ::
IP Address.....: 0.0.0.0
Subnet Mask.....: 0.0.0.0
Default Gateway.....: 0.0.0.0

C:\>ping 192.168.0.2

Pinging 192.168.0.2 with 32 bytes of data:

Reply from 192.168.0.2: bytes=32 time=1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128
Reply from 192.168.0.2: bytes=32 time=1ms TTL=128
Reply from 192.168.0.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

Top
```

● **Conclusion:** Hence, we have Successfully performed the Number of **Nodes** and **Physical** Layer Configuration Using Packet Tracer in Ubuntu