S.Balamurugan
241901014

EXPT: 11 CUSTOMISE SWITCH WITH NETWORK MODULES USING CISCO PACKET TRACER

Aim:

To **customize a switch** by adding **network modules** in Cisco Packet Tracer and verify extended connectivity options.

Algorithm:

1.Start Packet Tracer and place a Router 2811 on the workspace.

2. Power off the router (Physical tab).

3.Remove cover plates from empty module slots.

4.Insert network modules (e.g., NM-1T, NM-1E) into empty slots.

5.Power on the router.

6.Check new interfaces appear (FastEthernet, Serial, Ethernet).

7.Place PCs (PC0, PC1) near the router.

8.Connect PCs to router interfaces using Copper Straight-Through cables.

9.Configure router interfaces:

- Assign IP address
- Enable interface (no shutdown)

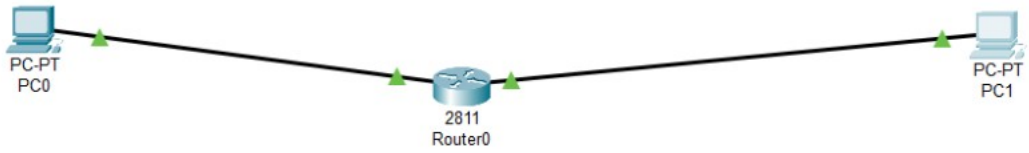
10.Configure PCs:

- Assign IP address in same subnet
- Set default gateway as router interface IP

11**.** Test connectivity:

- Ping router from PCs
- Ping PC1 from PC0 and vice versa

Topology:



Output:

```
C:\>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time=2ms TTL=128
Reply from 192.168.1.3: bytes=32 time=5ms TTL=128
Reply from 192.168.1.3: bytes=32 time=4ms TTL=128
Reply from 192.168.1.3: bytes=32 time=5ms TTL=128

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 5ms, Average = 4ms

C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time<1ms TTL=255
Reply from 192.168.1.2: bytes=32 time<1ms TTL=255
Reply from 192.168.1.2: bytes=32 time<1ms TTL=255
Reply from 192.168.1.2: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Result:

The switch was successfully customized by adding a network module, and the newly added ports functioned correctly for connecting PCs in Cisco Packet Tracer.