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 :
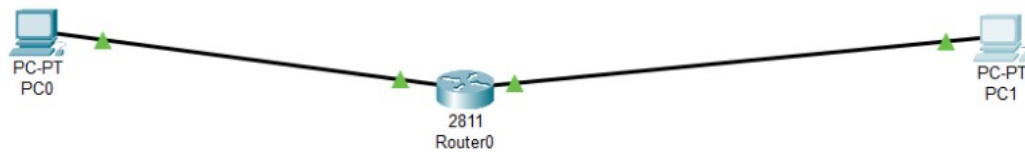
Output :

```
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.