Assignment – 3

🔸 **Connecting of static routing with 4 routers.**

❖ Procedure:

Step 1 : Take 4 Routers (Router0, Router1, Router2, Router3), 4 Switches (Switch0-Switch3), 8 PCs (PC0-PC7)

**Step 2 :** Connect the 4 Routers, 4 Switches, 7 PC's:

    Step 2.1 : Router0 → Router1 → Router2 → Router3

    Step 2.2 : Router0 → Switch0, Router1 → Switch1,
                          Router2 → Switch2, Router3 → Switch3

    Step 2.3 : And all the PC's connected to the switches like in diagram

Step 3 : Assign separate IP Address, Subnet Mask, and Default Gateway to each PC in class C.

Step 4 : Now set the routing for each Router by adding Network, Mask, Next Hop

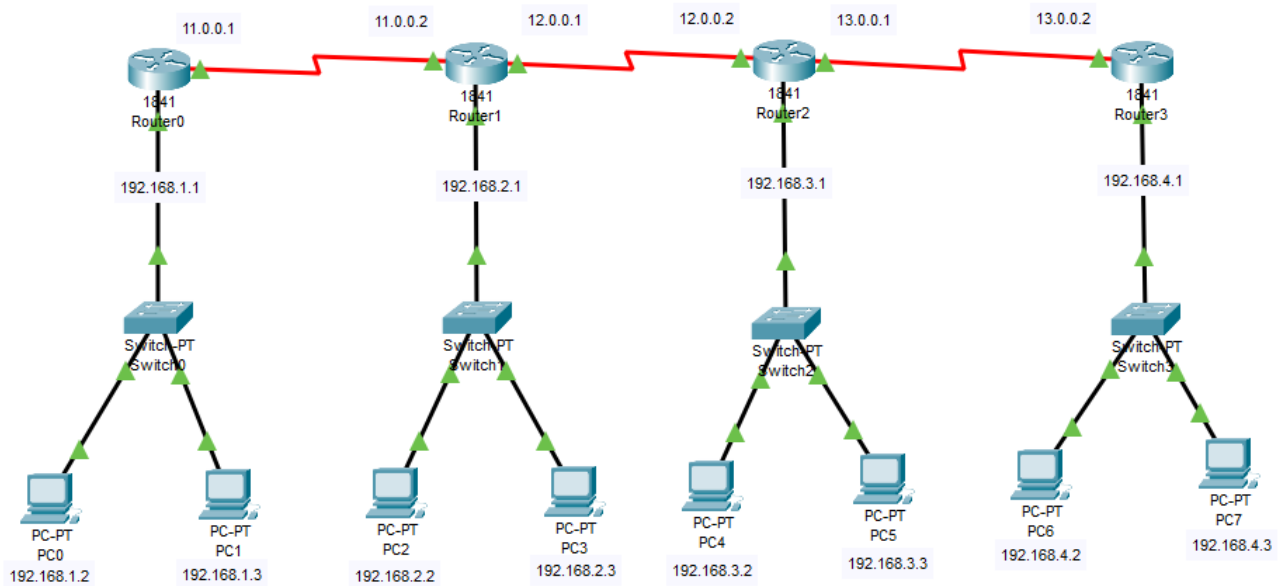just like that and do it for every router(Router0, Router1, …, Router4):
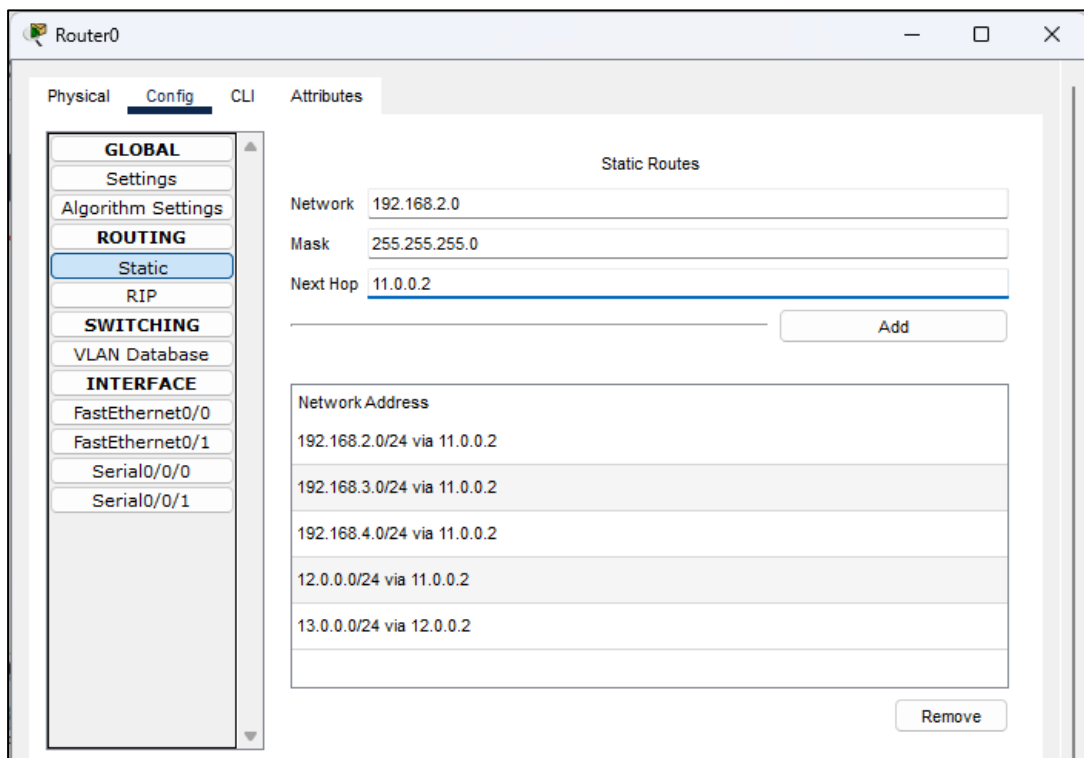
Step 4 : Test the Network Connection.

Open any PC's Command Prompt and ping another PC's IP Address.

Step 5 : If replies are successful, the connection works!

❖ Diagram:

❖ Output's:

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.3.2

Pinging 192.168.3.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.3.2: bytes=32 time=15ms TTL=125
Reply from 192.168.3.2: bytes=32 time=11ms TTL=125
Reply from 192.168.3.2: bytes=32 time=3ms TTL=125

Ping statistics for 192.168.3.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 3ms, Maximum = 15ms, Average = 9ms
```

```
C:\>ping 192.168.2.2

Pinging 192.168.2.2 with 32 bytes of data:

Request timed out.
Reply from 192.168.2.2: bytes=32 time=8ms TTL=126
Reply from 192.168.2.2: bytes=32 time=8ms TTL=126
Reply from 192.168.2.2: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.2.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 8ms, Average = 5ms
```