Experiment No: 03
Experiment Name: Packet through Routers (Routers Configured with CLI)

Objective:
Since we're going to transfer packet through Routers. we'll design a simple network diagram using " CISCO Packet Tracer".
In this experiment we'll test a simple packet transfer from one PC to another. The circuit contains 3 Routers with delta connection & some PCs. We'll configure the routers via command line interface and evaluate packet transfer (ICMP packet).

Design procedure:

Here a simple network connection using Routers connected via a delta connection:

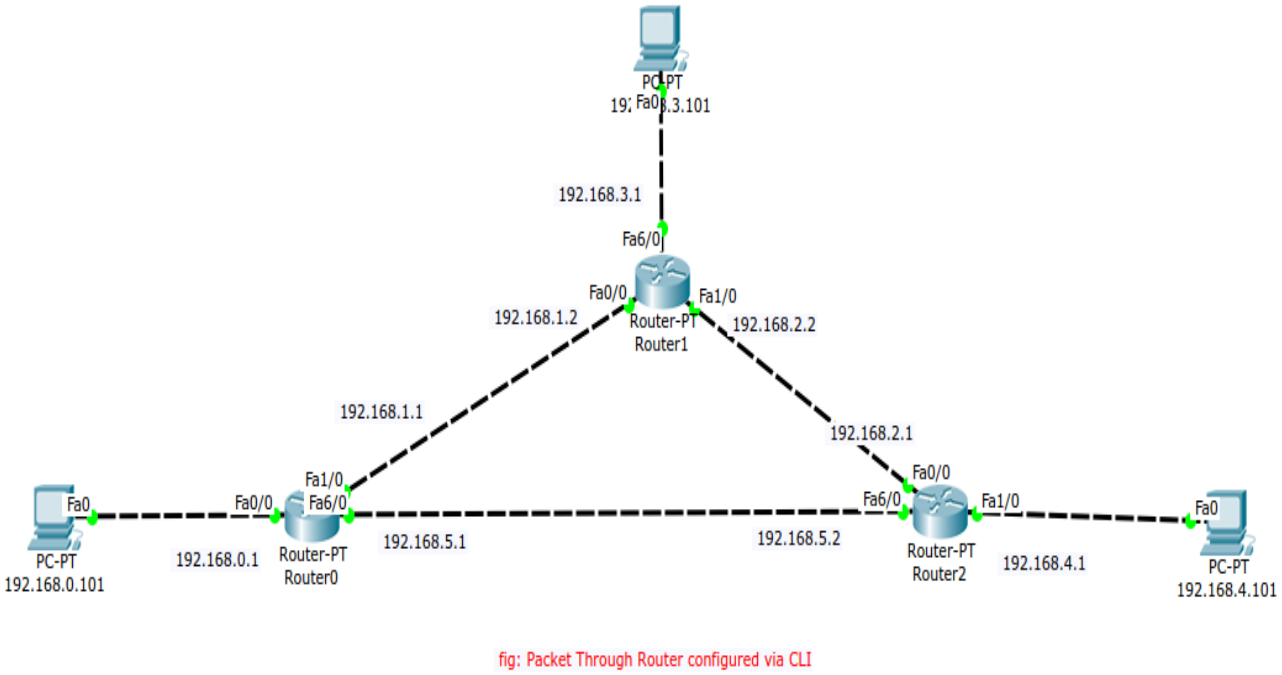

fig: Packet Through Router configured via CLI

Illustration 1: Delta Connected Routers and End Devices

The above figure shows the connection among PCs & routers.

Details procedure of router, End Device configuration:
1. End Device IP address configure:

- ***Device 1***

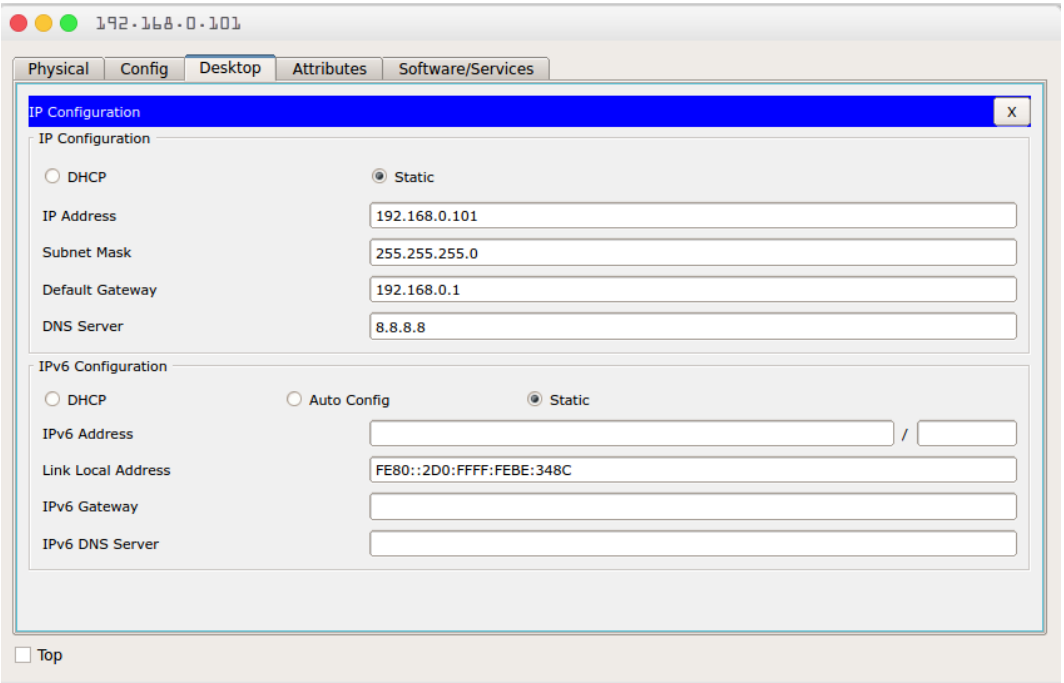

Illustration 2: Device 1 IP configuration

- ***Device 2***

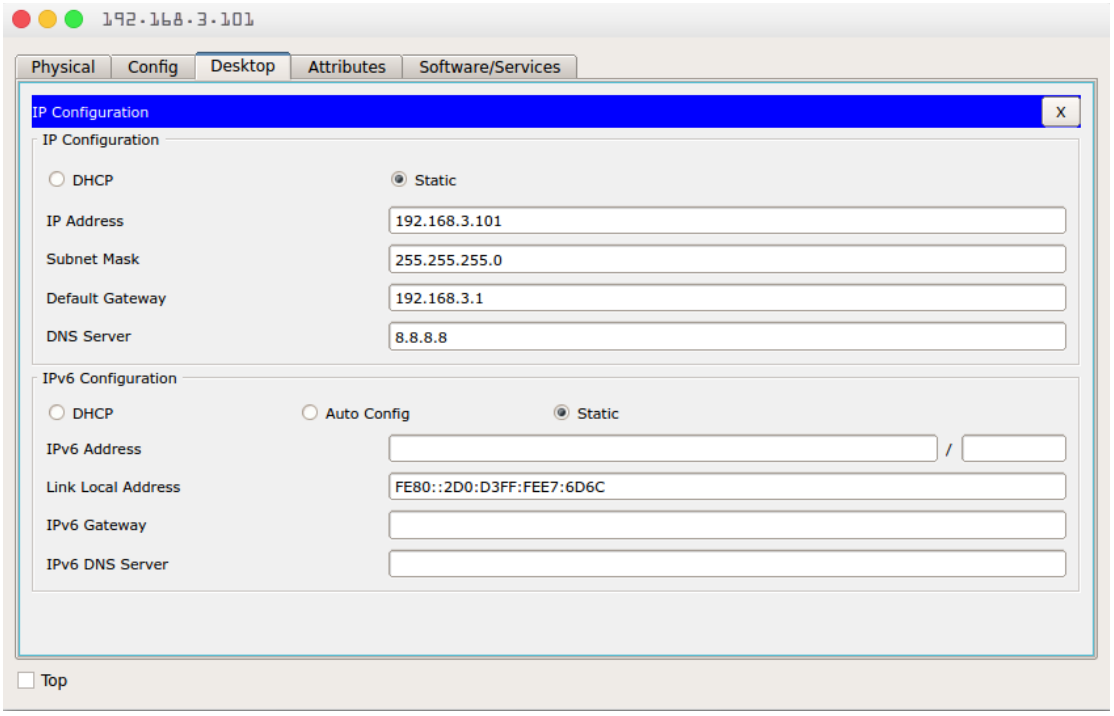

Illustration 3: Device 2 IP configuration

- ***Device 3***

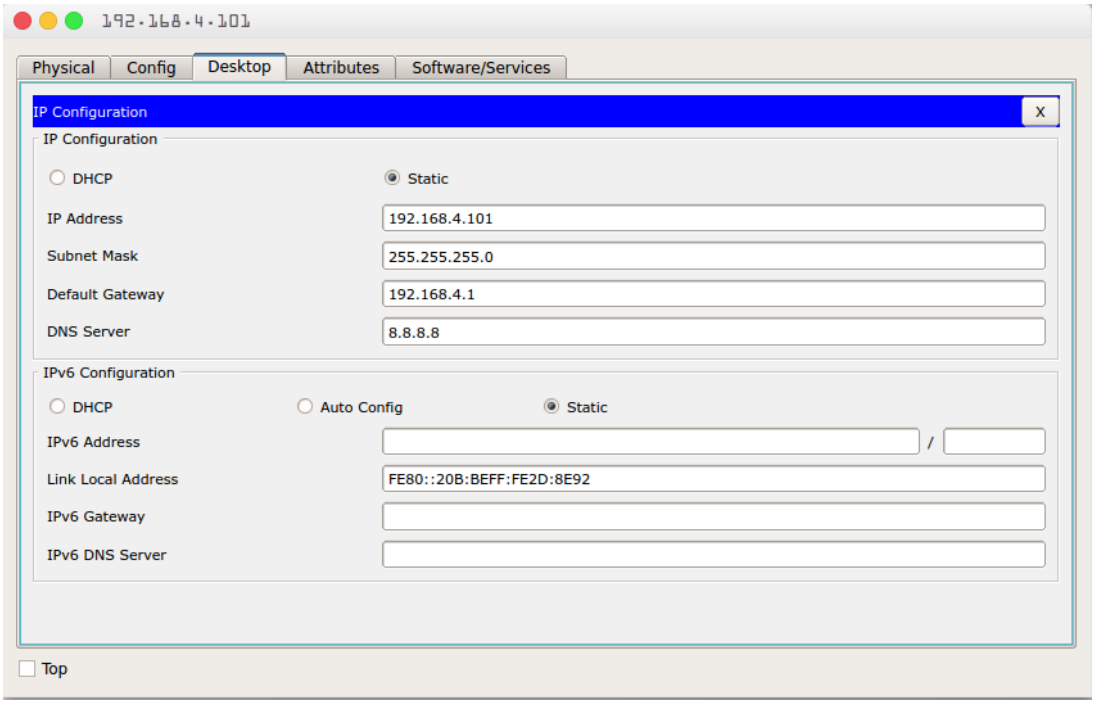

Illustration 4: Device 3 IP configuration

2. Router configuration with CLI: *Each Router requires two step to be fully functional, first step we assign IP-addresses relative to each router. The second step we make the routing table ready. The router configuration for each router is as follows**:***

- ***Router:1***

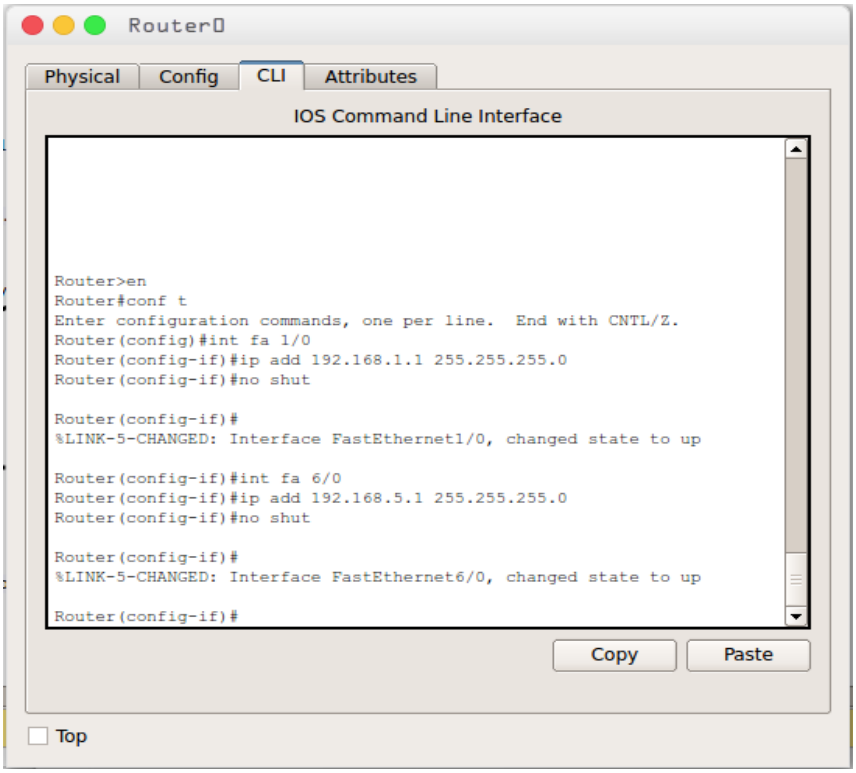

Illustration 5: Router-1 Configuration

- ***Router:2***

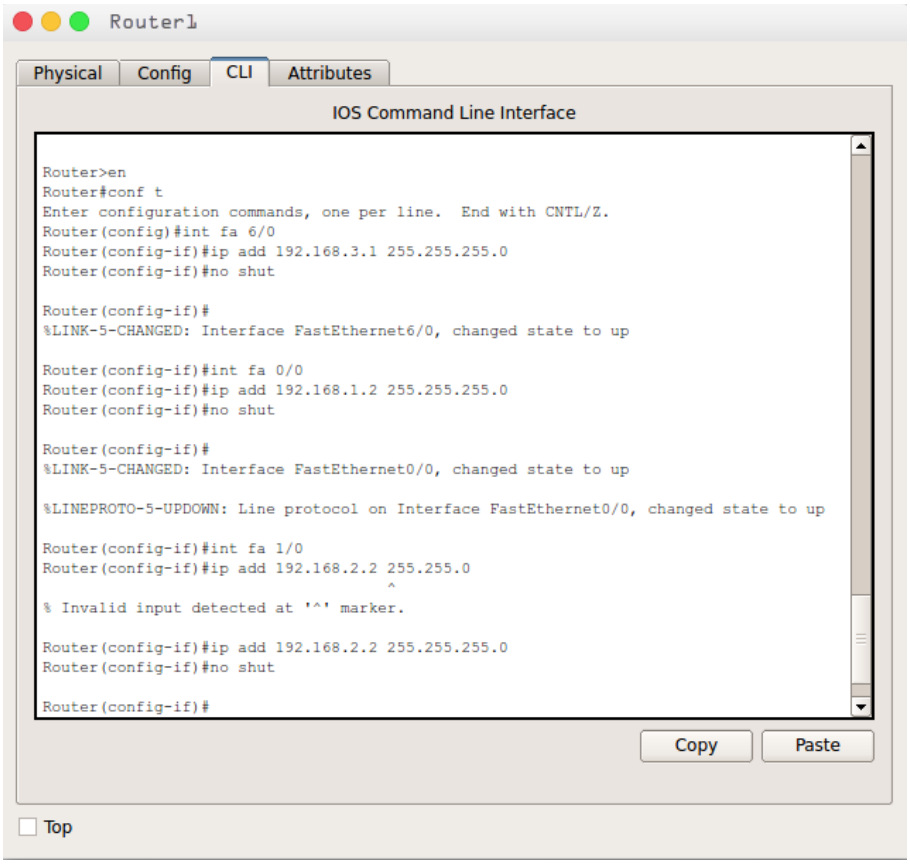

Illustration 6: Router-2 Configuration

- ***Router:3***

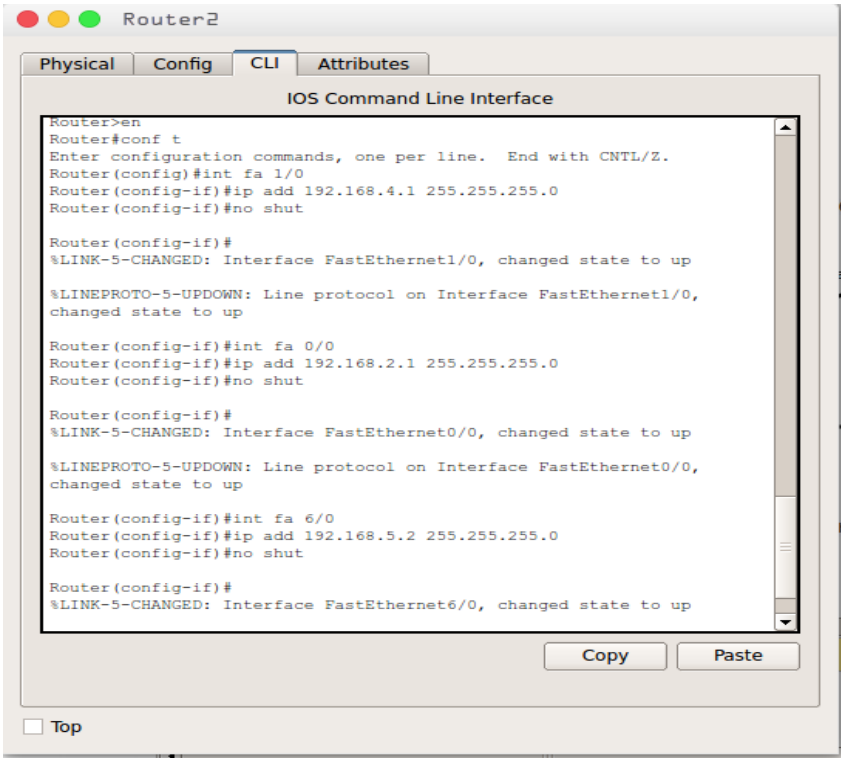

Illustration 7: Router-3 Configuration

Routing Table:

- **Router-1**

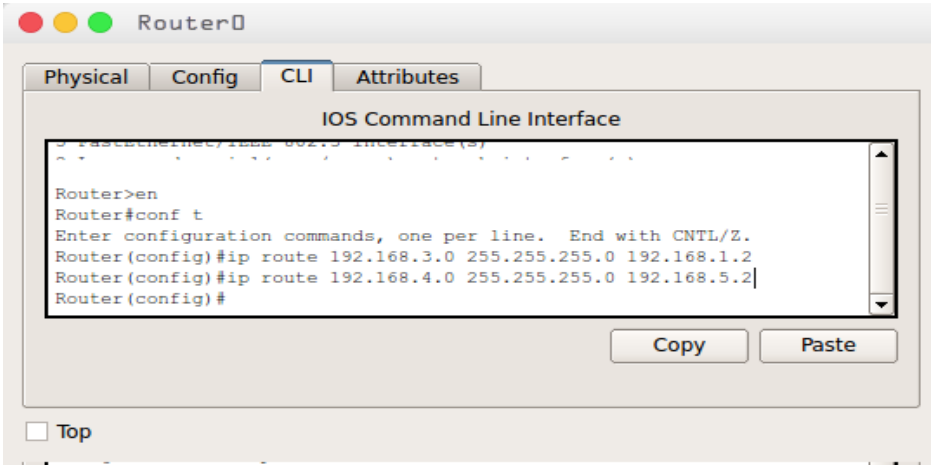

Illustration 8: Router-1 Routing Table

- **Router-2**

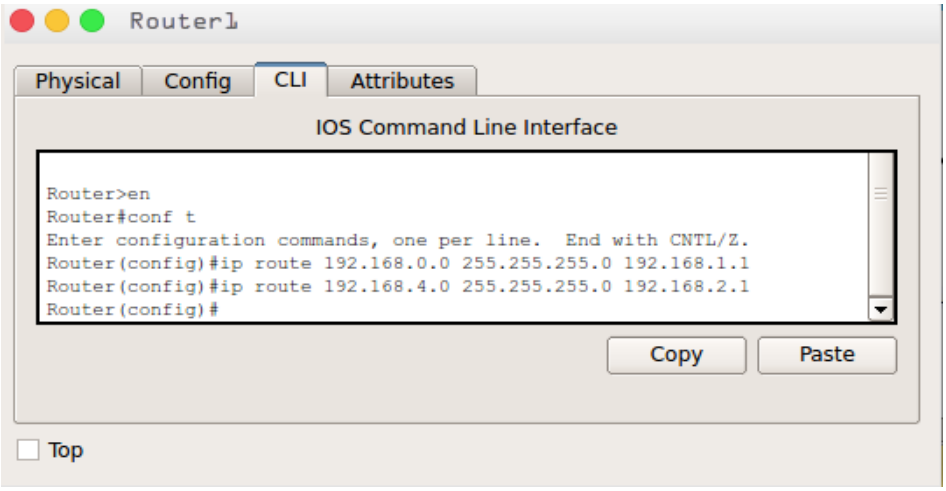

Illustration 9: Router-2 Routing Table

- **Router-3**

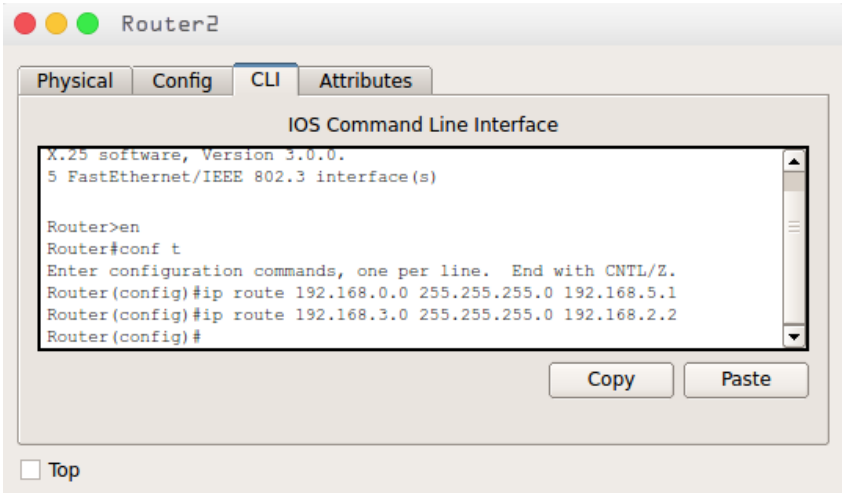

Illustration 10: Router-3 Routing Table

3. Packet transferring between two Device.

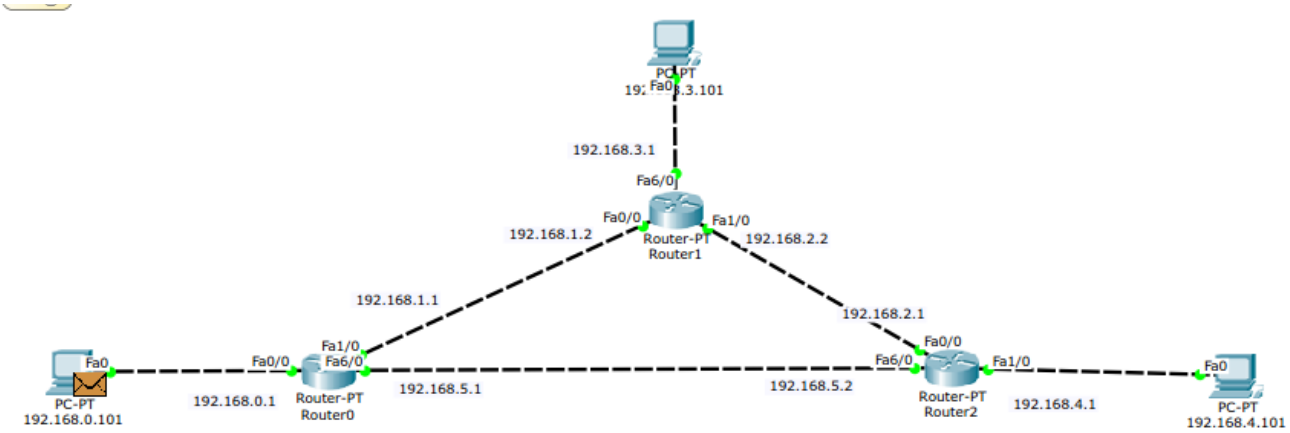

fig: Packet Through Router configured via CLI

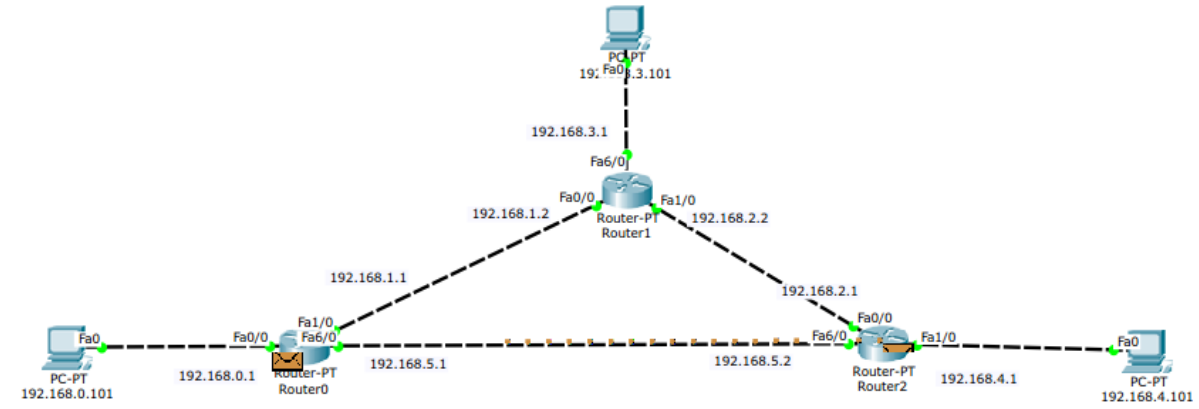

fig: Packet Through Router configured via CLI

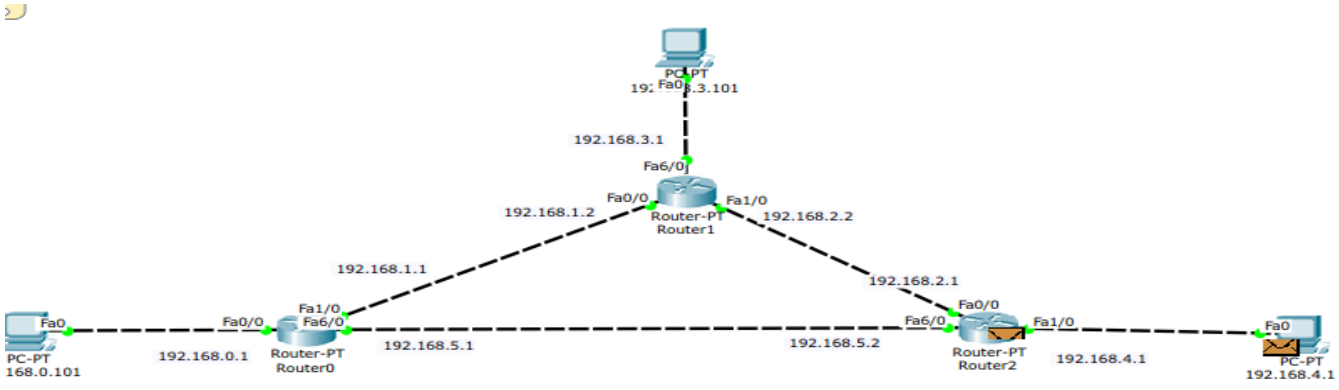

fig: Packet Through Router configured via CLI