**Jahangirnagar University**

**Department of Computer Science & Engineering**



**Course Code**: CSE-402

**Course Title**: Computer Networking Laboratory

**Submitted by**:

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**Roll No**: 47

**Date of Submission**: 12th September, 2019

**Experiment No: 03**

**Experiment Name:** Configuring of a Router from CLI.

**Introduction:**

In this experiment we will configure routers in between some networks to connect to further network via routing table where network and hop will be mentioned. When sending a packet this routers will recognize which hop to jump to send a packet.

**Description:**

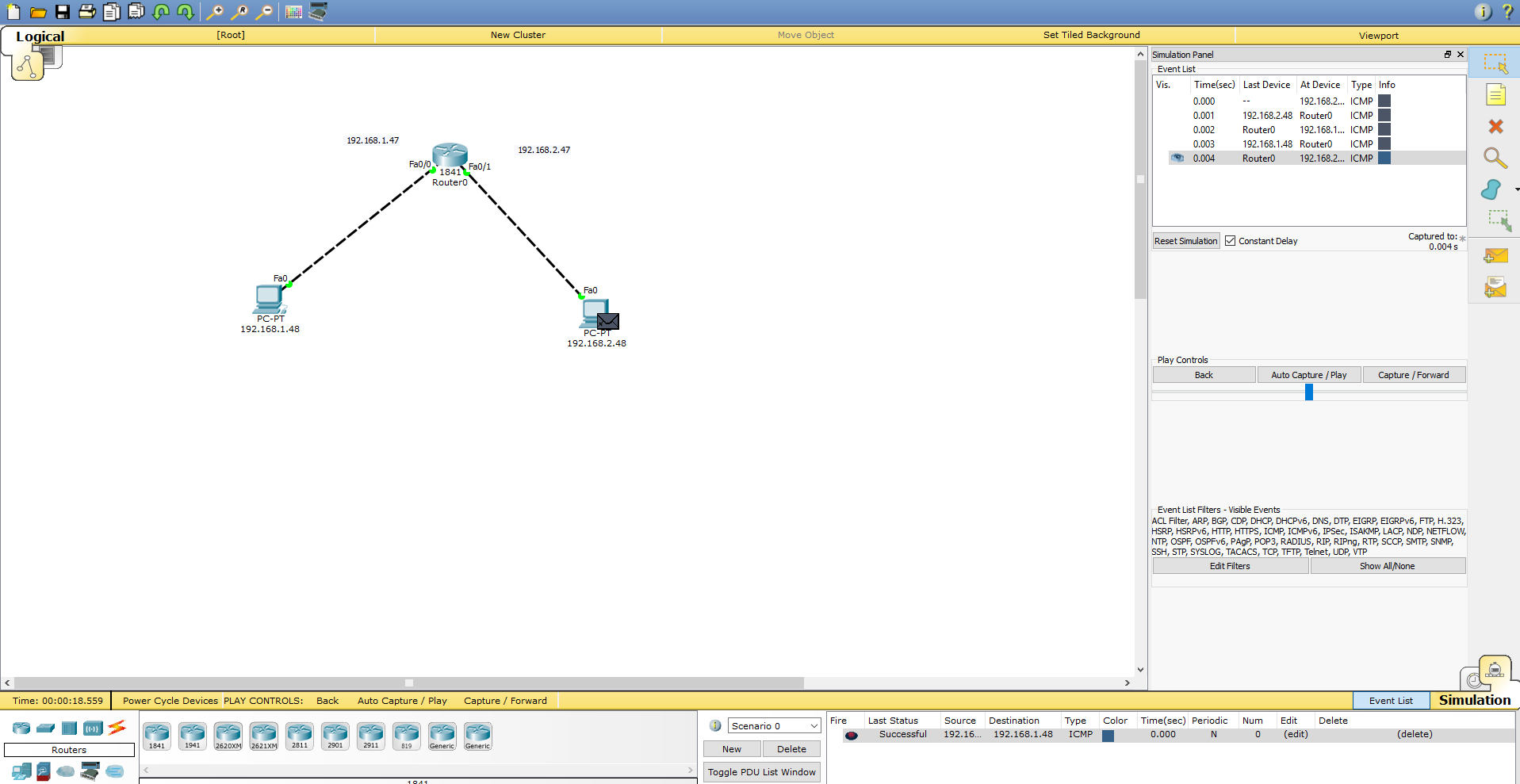
We used cisco packet tracer for simulation. Several computer devices are connected through the routers and different IP addresses were assigned to them. Then a packet is sent through them to check the characteristics of routers we created a hop table to access networks that are far from the routers to pass the packets.

**Simulation:**

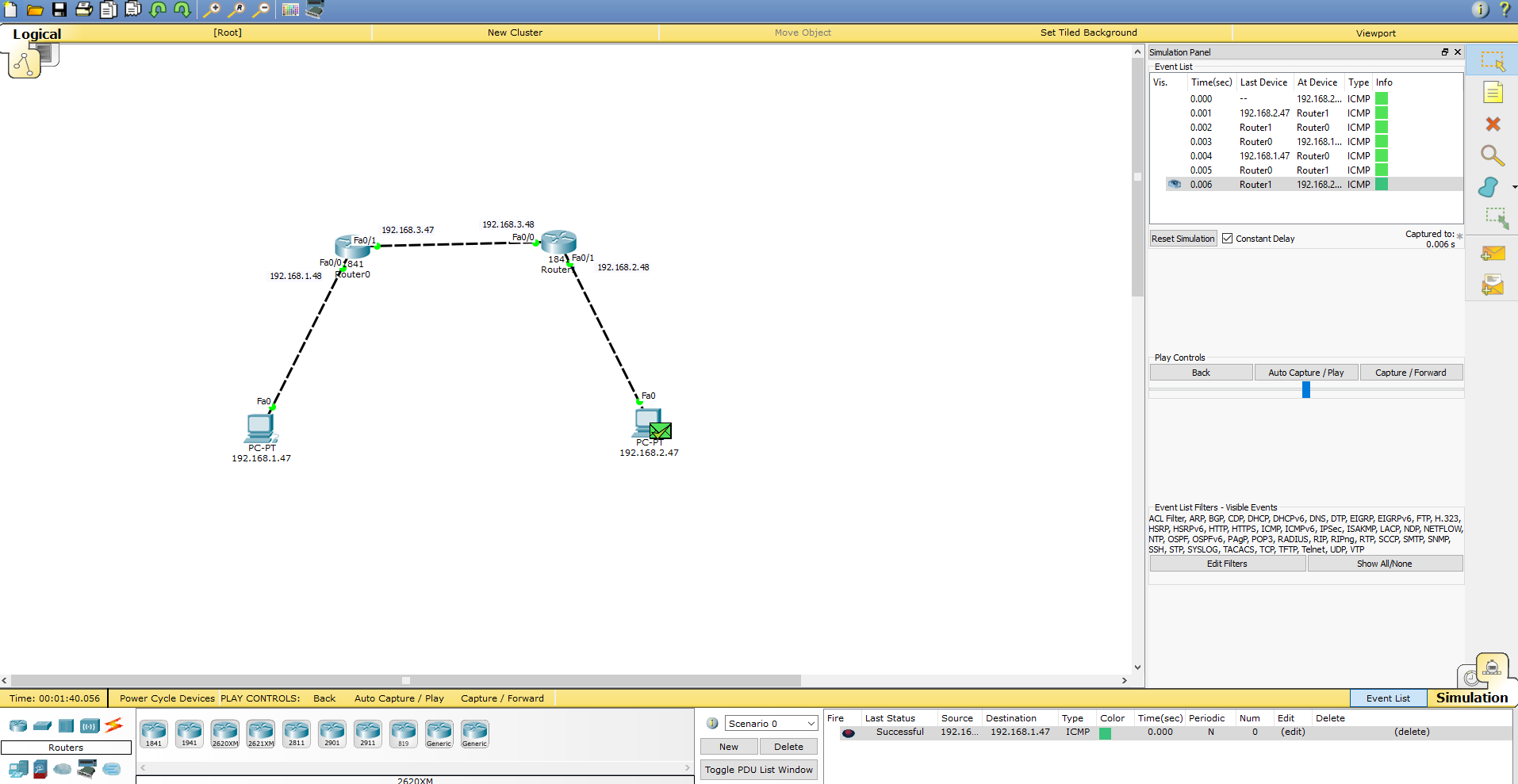
**Router:**

Routers are small electronic devices that join multiple computer networks together using either wired or wireless connections. In technical terms, a router is a Layer 3 network gate way device, meaning that it connects two or more networks and that the router operates at the network layer of the OSI model.

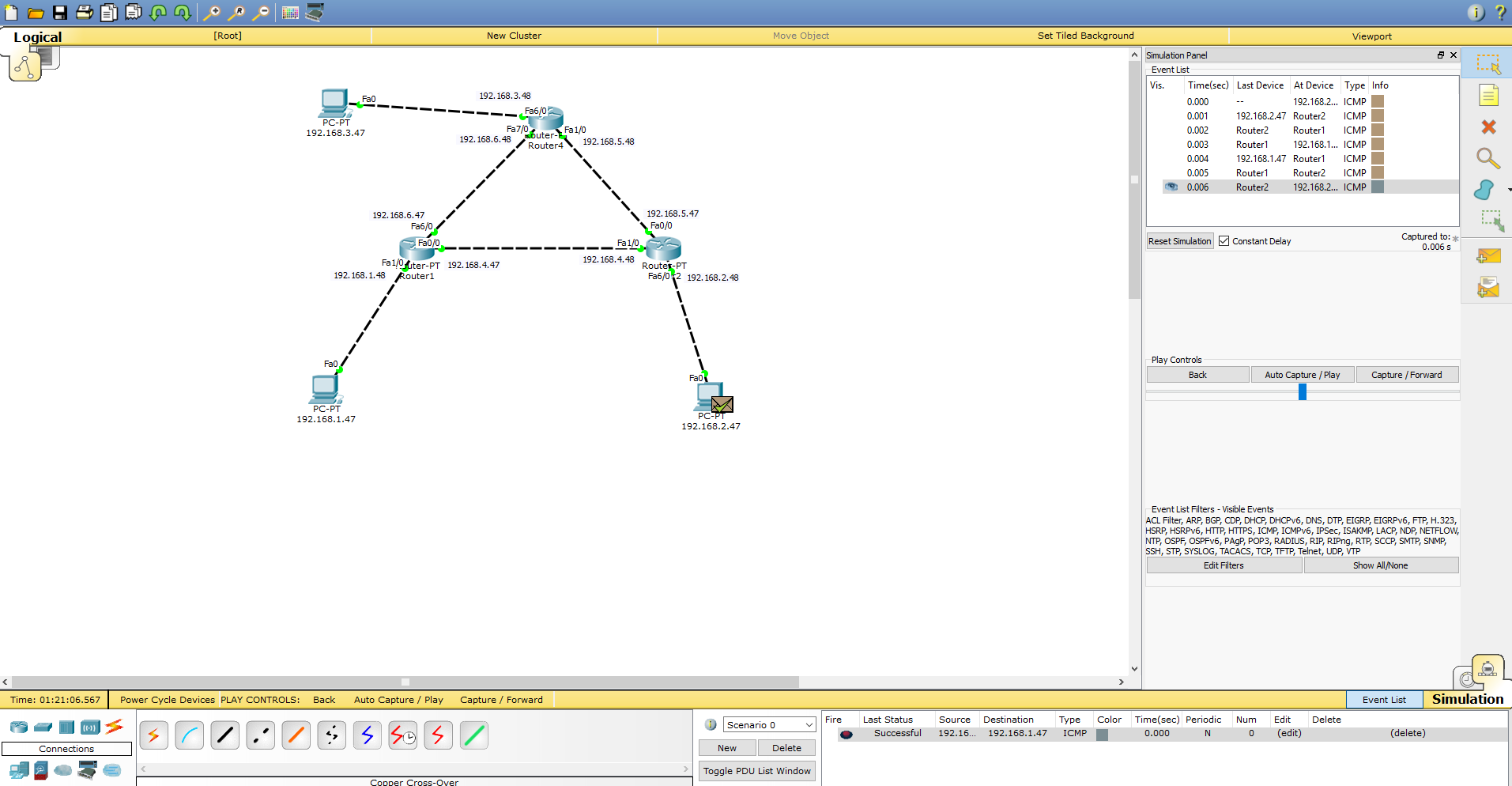
1. **One Router:**

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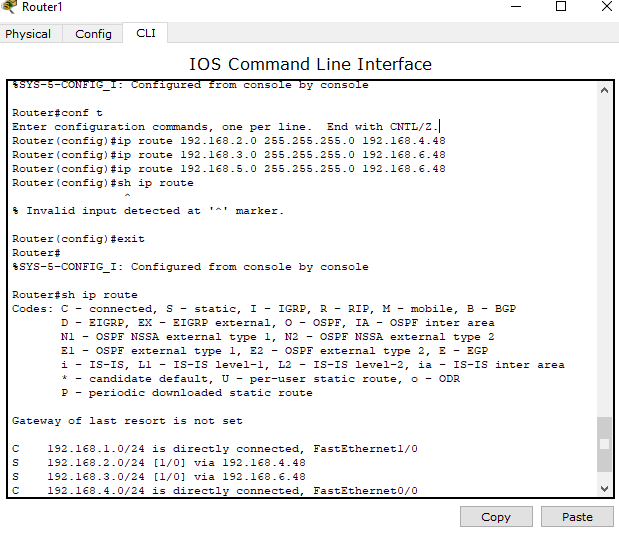
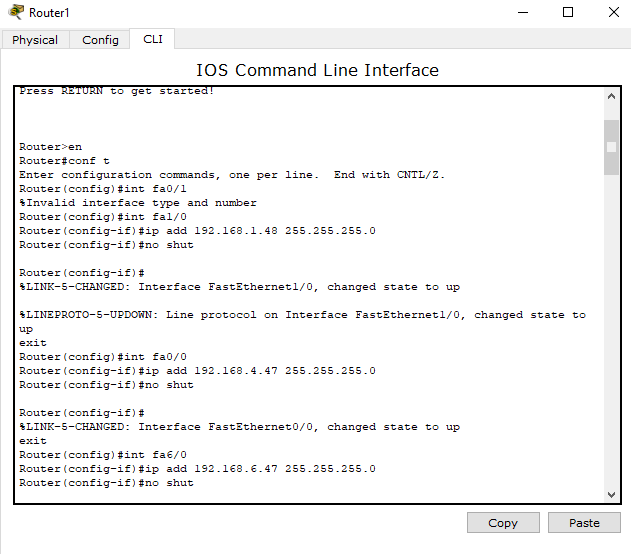
1. **Multiple Router:**



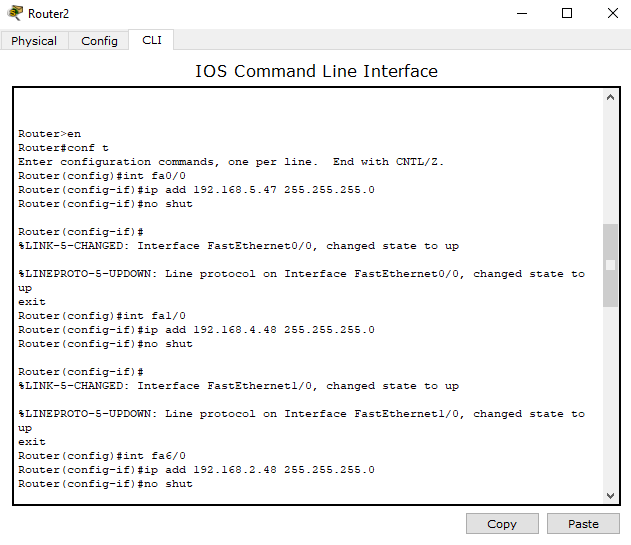
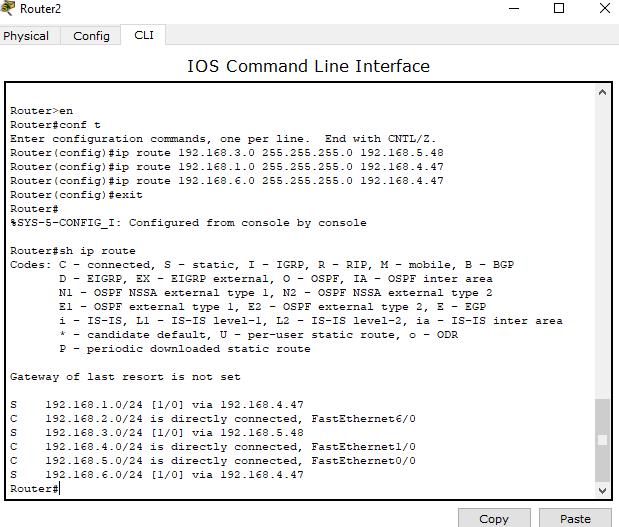
1. **Multiple Router in a Circle:**

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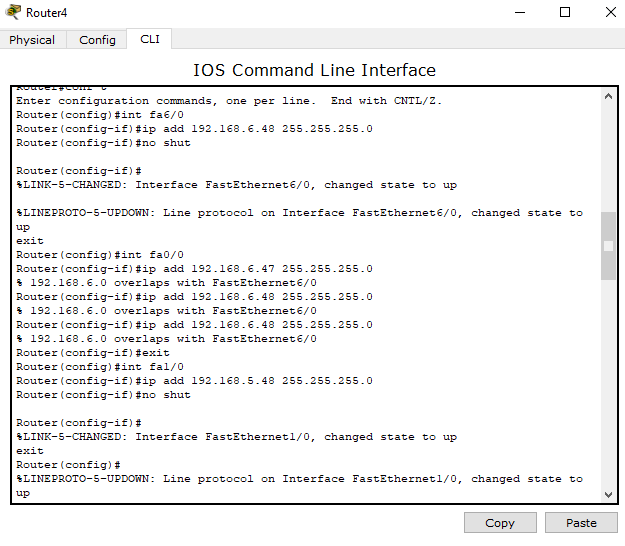
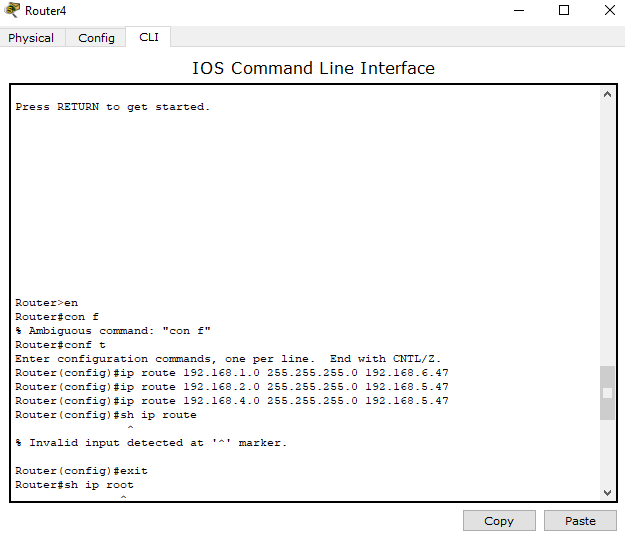
* **Configure CLI For Router 1:**



* **Configure CLI For Router 2:**

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* **Configure CLI For Router 4:**

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**Discussion:**

We can see that the Routers sends the packet the required path mentioned in the rout table. People tend to get benefit from a router for through a packet to a different network. A router is better for connecting different network. After using router we can easily use hub, switch, PC for any other connection and for any other communication.