

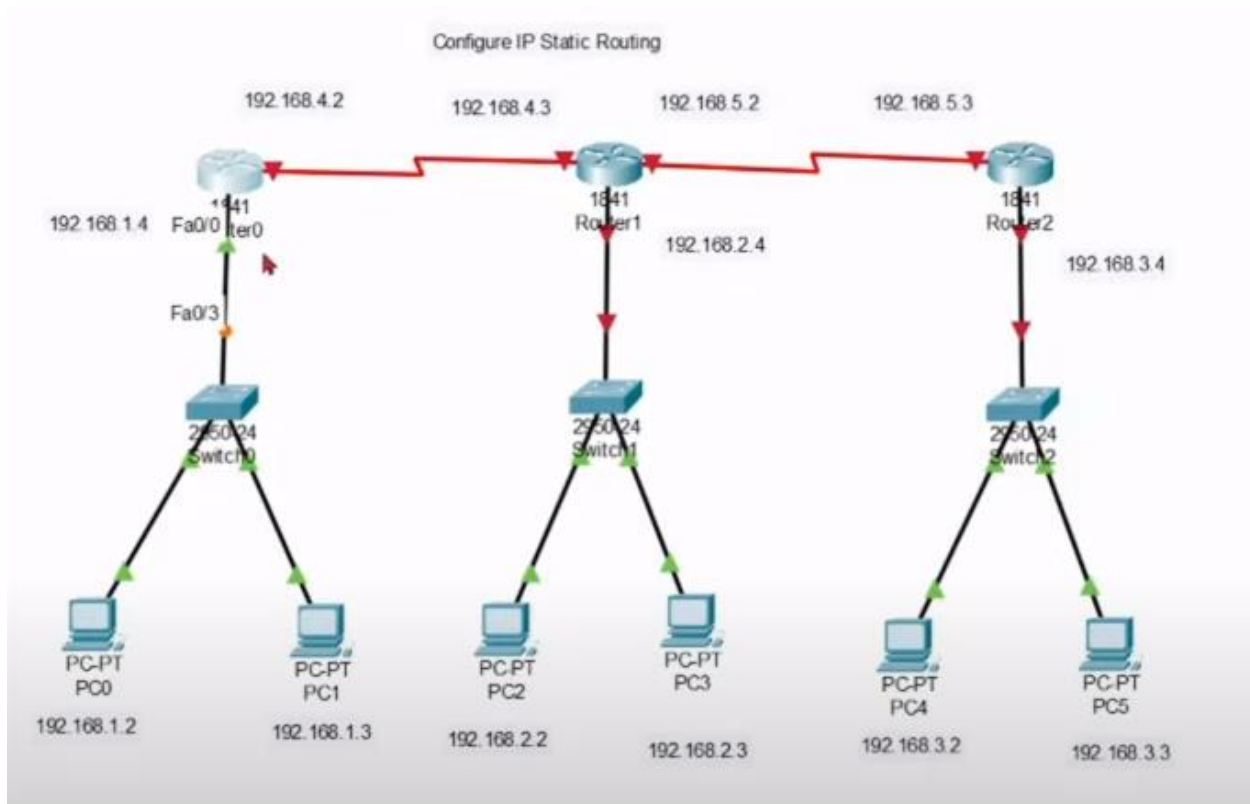
## Lab Manual 7

### Implement Static routing and Router on a Stick Inter-VLAN Routing

CLO 3

Task	0	1	2	3	4
<b>Create topology and apply all steps</b>	Student establish some connections	Student assign IP address to all devices as given in figure	Student does static routing accurately	Student assign correct gateway to each network	“Ping” command is working on all devices

**TASK 1: Implement Static Routing on the figure given below**



## Command

### *Encapsulation Dot1Q*

## Use

Allows you to use a router interface as a trunk port to a switch. This is also known as “Router on a stick” because the switch uses the router to route between VLANs.

## Syntax

*Router(config-subif)#encapsulation dot1Q <vlan>*

Creating sub interface in the below figure:

```
Router(config)#inter
Router(config)#interface g
Router(config)#interface gigabitEthernet 0/0.10
Router(config-subif)#ena
Router(config-subif)#enc
Router(config-subif)#encapsulation do
Router(config-subif)#encapsulation dot1Q ?
    <1-4094> IEEE 802.1Q VLAN ID
Router(config-subif)#encapsulation dot1Q 10
Router(config-subif)#ip ad
Router(config-subif)#ip address 192.168.10.4 255.255.255.0
Router(config-subif)#exit
Router(config)#inter
Router(config)#interface g
Router(config)#interface gigabitEthernet 0/0.20
Router(config-subif)#ena
Router(config-subif)#enc
Router(config-subif)#encapsulation
```

**TASK 2:** Implement the following topology and perform stick inter Vlan Routing

