PC0	NIC	192.168.1.10	255.255.255.0
PC1	NIC	192.168.1.11	255.255.255.0
Router	FastEthernet0/0	192.168.1.1	255.255.255.0
Router	FastEthernet0/1	192.168.2.1	255.255.255.0
PC2	NIC	192.168.2.10	255.255.255.0
PC3	NIC	192.168.2.11	255.255.255.0

---

6. Configuration Steps

Step 1: Connect Devices

- Connect PCs to switches.
- Connect switches to router interfaces (F0/0 and F0/1) using **straight-through cables**.

Step 2: Assign IP Addresses to PCs

- Click each PC → Desktop → IP Configuration:
  - For PC0 and PC1: Set IP in 192.168.1.x with gateway 192.168.1.1.
  - For PC2 and PC3: Set IP in 192.168.2.x with gateway 192.168.2.1.

Step 3: Configure Router Interfaces

- Click Router → CLI tab
- Enter configuration mode:

```
Router> enable

Router# configure terminal

Router(config)# interface FastEthernet0/0

Router(config-if)# ip address 192.168.1.1 255.255.255.0
```

```
Router(config-if)# no shutdown
Router(config-if)# exit
Router(config)# interface FastEthernet0/1
Router(config-if)# ip address 192.168.2.1 255.255.255.0
Router(config-if)# no shutdown
Router(config-if)# exit
Router(config)# exit
```

---

7. Verifying Configuration

- Use ping from PC0 to PC2 or PC3.
- Use show ip interface brief on the router to verify interface status.
- Use ipconfig in PC Command Prompt to check IP configuration.

---

8. Observations

- Interfaces were successfully configured.
- PCs were able to communicate across networks via the router.
- The ping command verified that routing was properly configured.

Configure Router Interface

→ Click Router → CLI Tab

→ Enter Configuration mode:

```
Router > enable
Router # Configure terminal
Router (config) # Interface Fast Ethernet 0/0
Router (config) # ip address 192.168.1.1 255.255.255.0
Router (config-if) # no shutdown
Router (config-if) # exit
Router (config) # interface FastEthernet 0/1
Router (config-if) # ip address 192.168.2.1 255.255.255.0
Router (config-if) # no shutdown
Router (config-if) # exit
Router (config) # exit
```