**Exercise 3: Configuration of IP Address in Router**

**Objective:** To demonstrate the configuration of IP Address in router

**Pre-requisite:** IP Address, Range of IP Address and Classes of IP Address

**Components**:

| Devices | Required Nos |
|---|---|
| PCs | 2 |
| Copper cross-over Cables | 2 |
| Router | 1 |

**Addressing Table:**

| Device | Interface | IP Address | Subnet Mask | Gateway |
|---|---|---|---|---|
| PC0 | Fa0/0 | 192.168.10.2 | 255.255.255.0 | 192.168.10.1 |
| PC1 | Fa0/0 | 192.168.11.2 | 255.255.255.0 | 192.168.11.1 |
| Router0 | Gigabit 0/0 | 192.168.10.1 | 255.255.255.0 | - |
| Router0 | Gigabit 0/1 | 192.168.11.1 | 255.255.255.0 | - |

**Procedure:**

**Step 1:** Drag 2 PCs and a router in the console area.
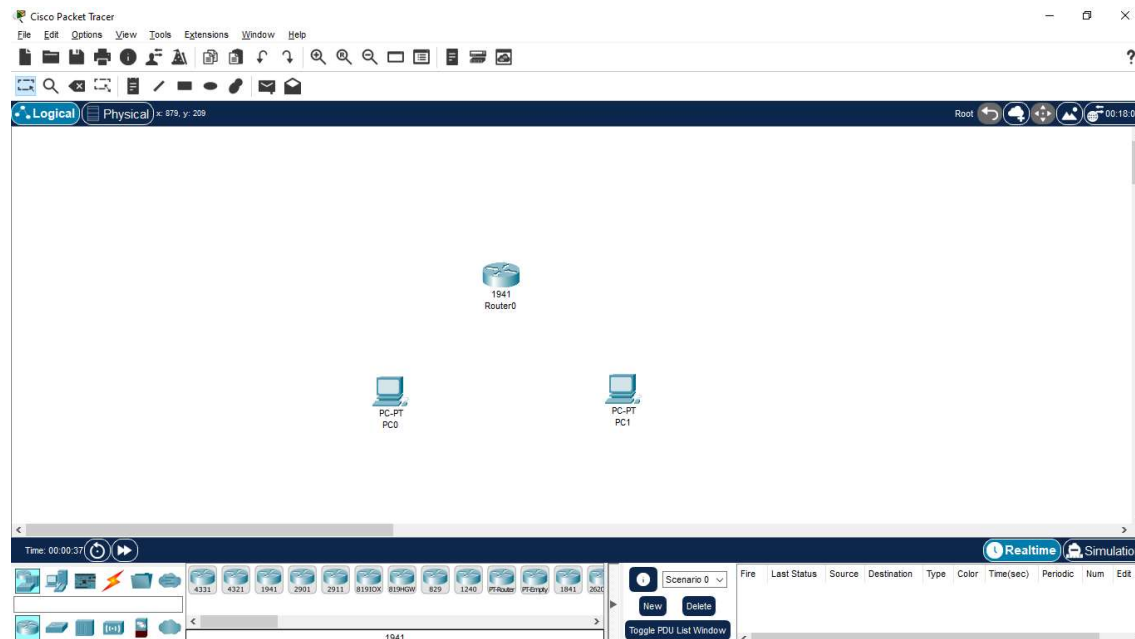
**Step 2:** Select Connectivity & Copper cross-over cable. Click on PC0 to get the interface options. Select Fa0/0
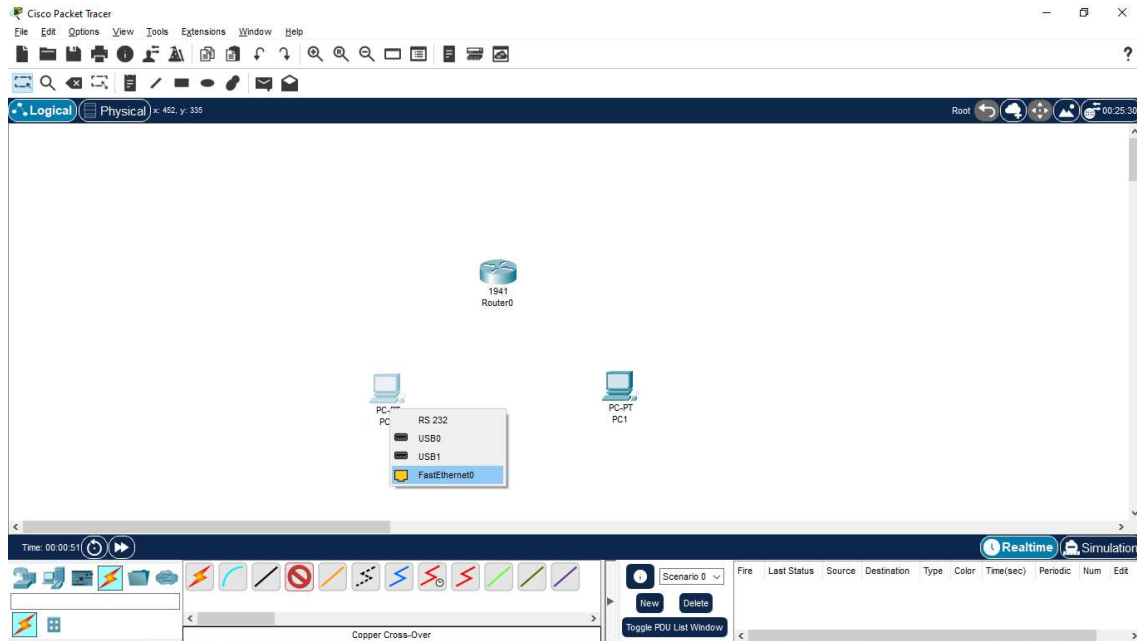


**Step 3:** Click on router0 to get the interface options and select GigabitEthernet0/0.
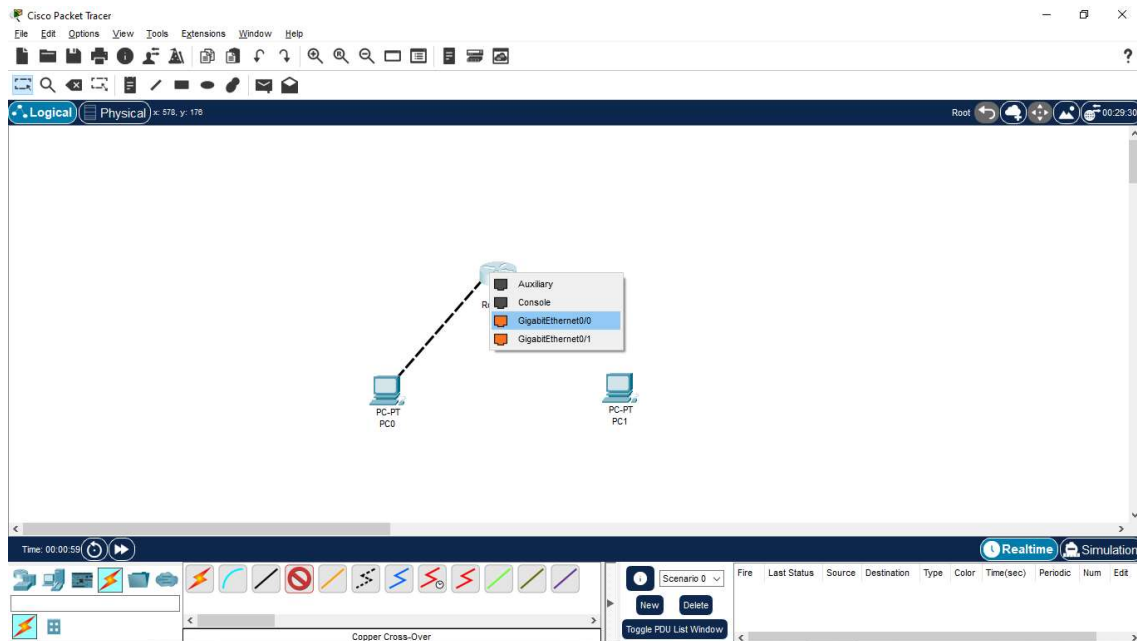
**Step 4**: Now PC0 and Router0 are physically connected. Again select copper cross-over cable and again click on Router0 to get the interface options and select GigabitEthernet0/1.
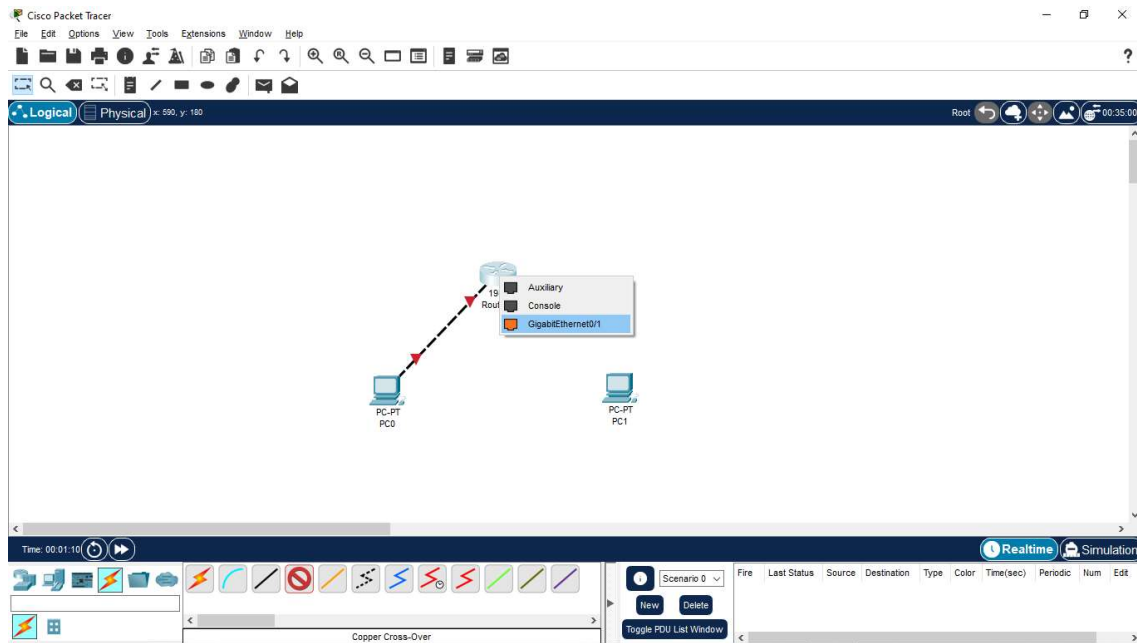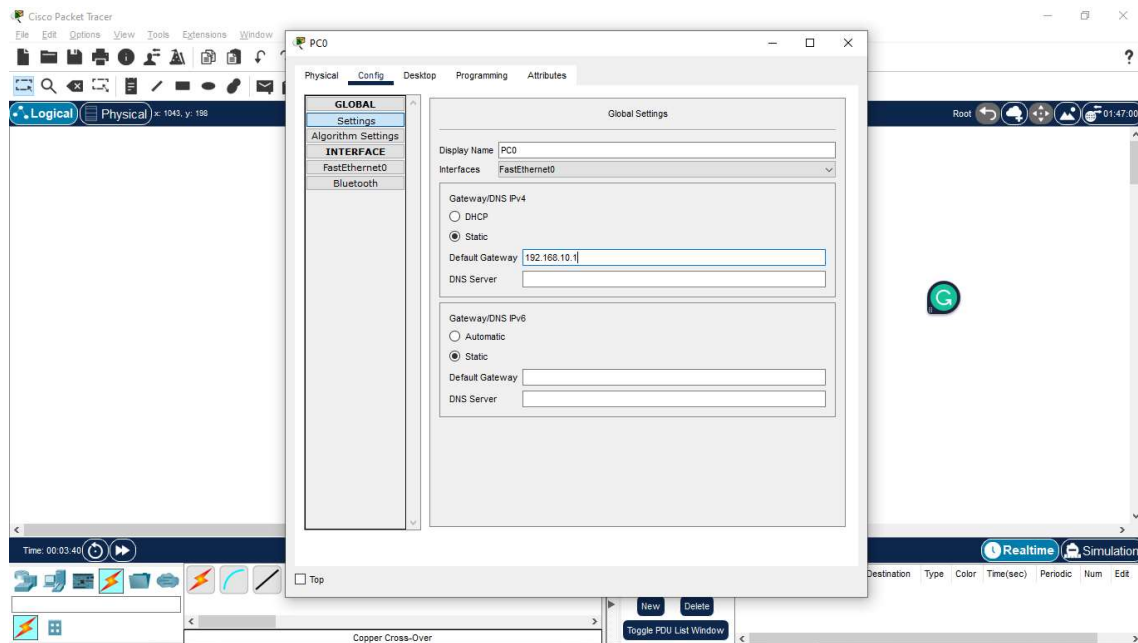


**Step 5:** Click on PC1 to get the interface options and select Fa0/0.

**Step 6:** Now the PCs are physically connected through Router. To establish logical connectivity,
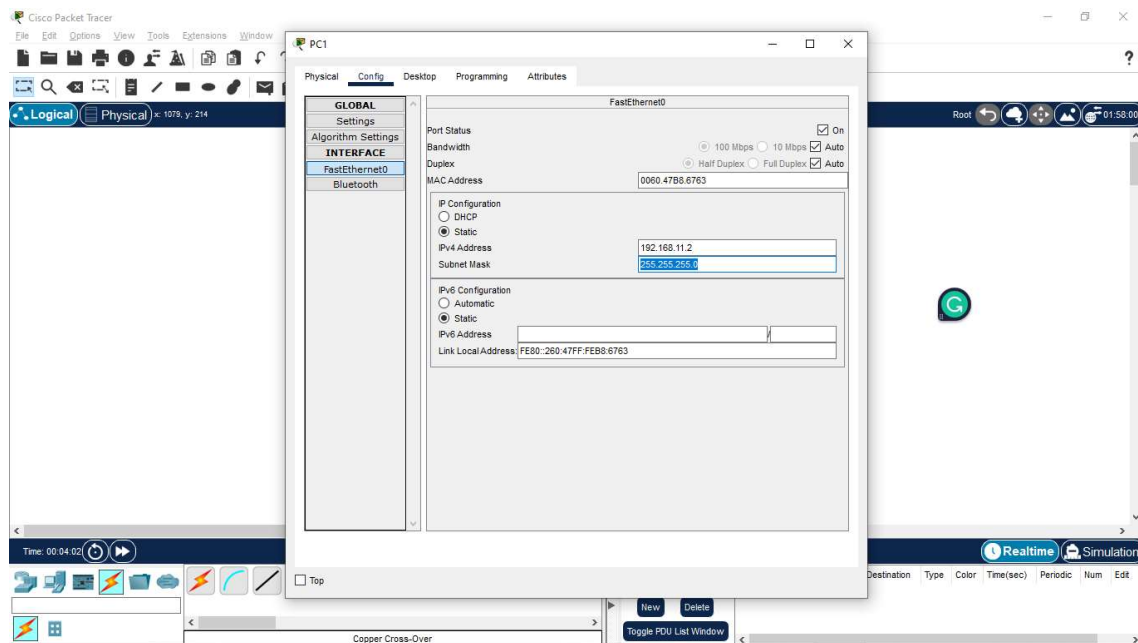
- Click on PC0.
- Select Config tab.
- Click on FastEhternet0/0 in the left pane.
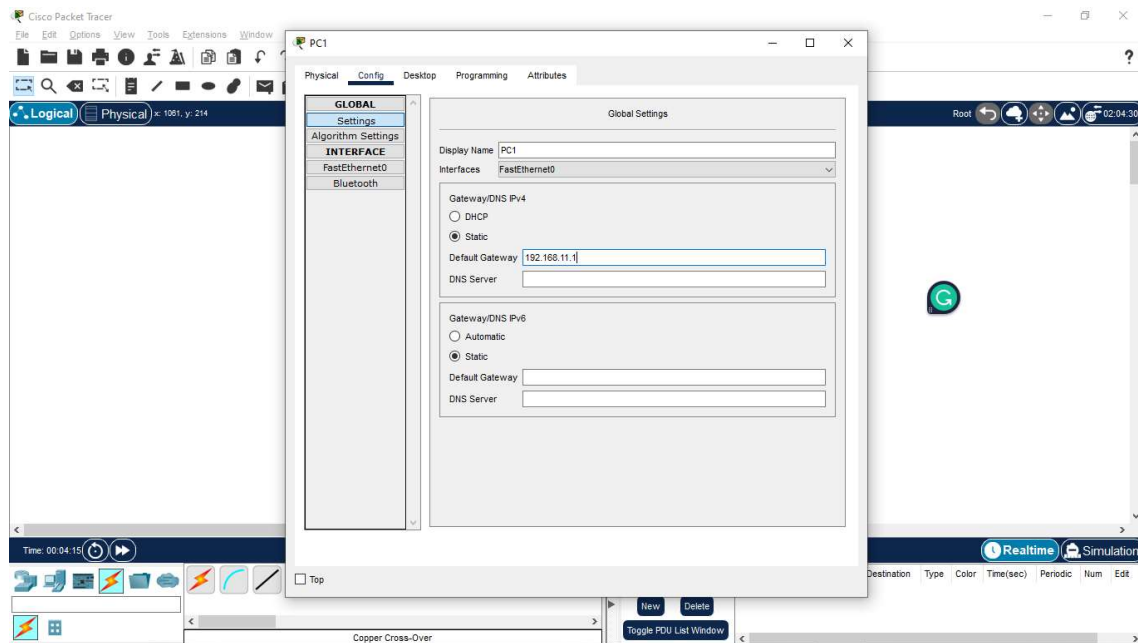- Configure the ip address 192.168.10.2 and subnet mask 255.255.255.0
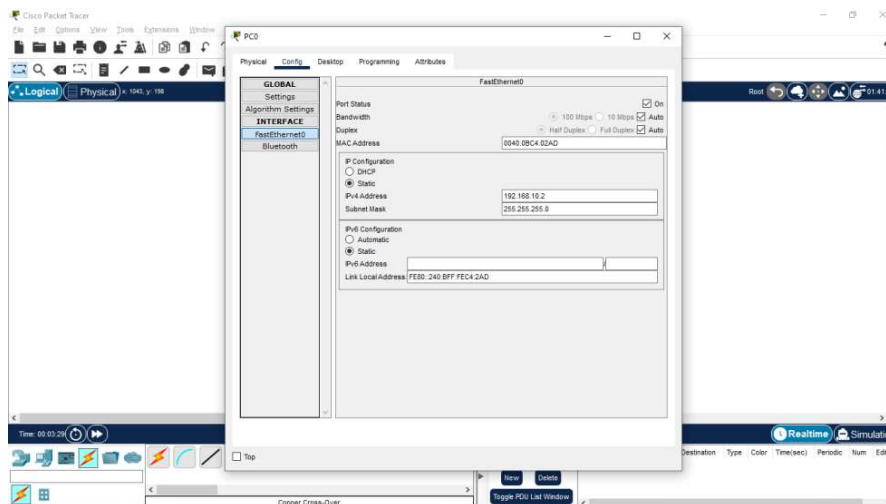
**Step 7:** Now click on settings and configure the gateway as 192.168.10.1



**Step 8:** Repeat the same procedure for PC1 and Configure the ip address 192.168.11.2 and subnet mask 255.255.255.0
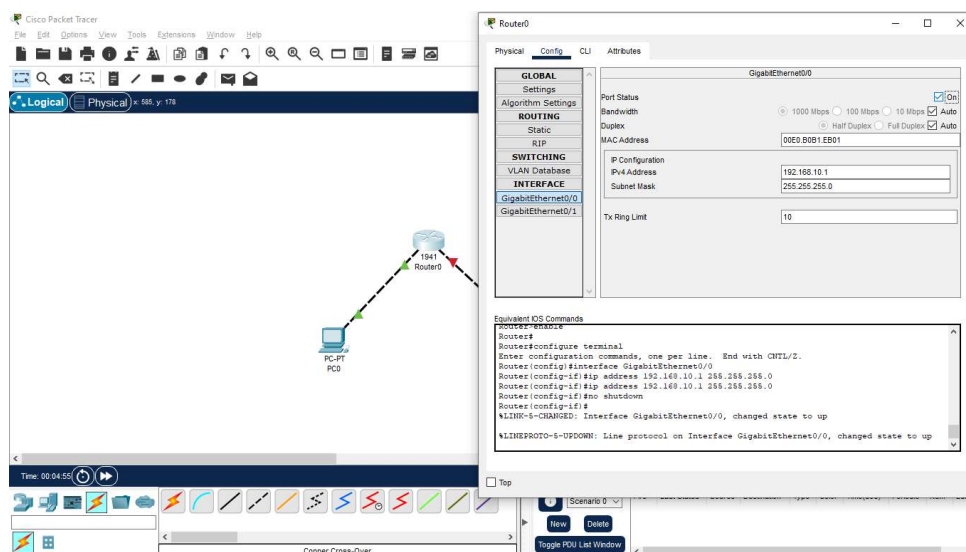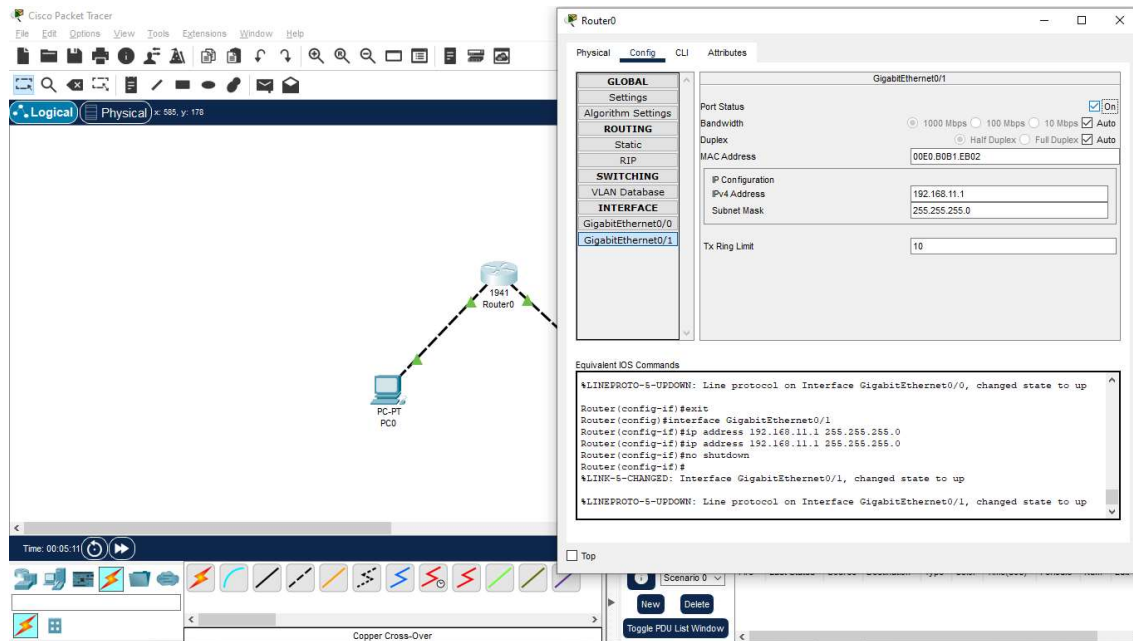
**Step 9:** Now click on settings and configure the gateway as 192.168.11.1



**Step 10:** Router configuration

- Click on Router0 and select Config tab.

- Click on GigabitEthernet0/0 in the left pane and configure the ip address 192.168.10.1 and subnet mask 255.255.255.0

- Click on GigabitEthernet0/1 in the left pane and configure the ip address 192.168.11.1 and subnet mask 255.255.255.0

**Step 11:** Now both the PCs are physically and logically connected. To check the logical connectivity,

- Click on PC1.
- Select Desktop tab.
- Click on Command Prompt icon.
- Type ping 192.168.10.2 to fetch the output as follows