

Semester 5th | Practical Assignment | Computer Networks (2301CS501)

Date: 12/9/24

Lab Practical #11:

Study the concept of routing using packet tracer. (Dynamic Routing)

Practical Assignment #11:

1. Connect the two different networks based on the calculated IP addresses and subnet using a packet tracer.

• **Step 1**: First, open the cisco packet tracer desktop and select the devices given below

| S.NO | Device | Model Name | Qty. |
|------|--------|------------|------|
| 1. | PC | PC | 4 |
| 2. | Switch | PT-Switch | 2 |
| 3. | Router | PT-Router | 2 |

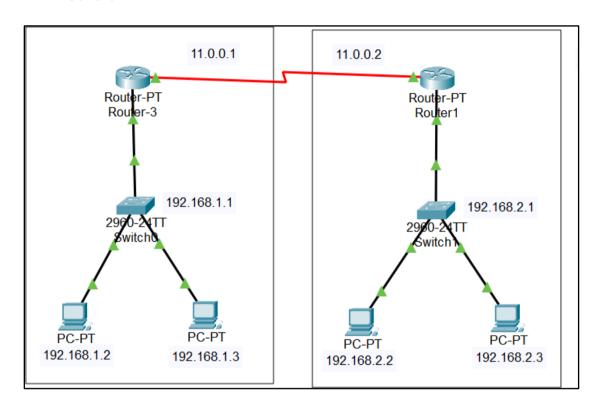
• Step 2: IP Addressing Table For PCs:

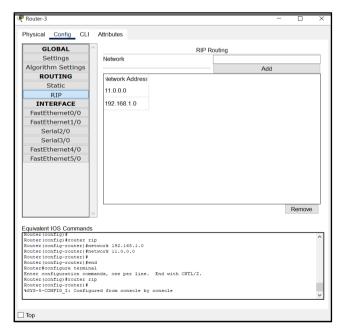
| S.NO | Device | IPv4 Address | Subnet Mask | Default Gateway |
|------|--------|--------------|---------------|-----------------|
| 1. | PC0 | 192.168.1.2 | 255.255.255.0 | 192.168.1.1 |
| 2. | PC1 | 192.168.1.3 | 255.255.255.0 | 192.168.1.1 |
| 3. | PC2 | 192.168.2.2 | 255.255.255.0 | 192.168.2.1 |
| 4. | PC3 | 192.168.2.3 | 255.255.255.0 | 192.168.2.1 |

Semester 5th | Practical Assignment | Computer Networks (2301CS501)

Date: 12/9/24

- **Step 3:** Then, create a network topology as shown below the image.
- Step 4: Use an Automatic connecting cable to connect the devices with others.







Semester 5th | Practical Assignment | Computer Networks (2301CS501)

Date: 12/9/24

- 2. Connect the three different networks based on the calculated IP addresses and subnet using a packet tracer.
 - Step 1: First, open the cisco packet tracer desktop and select the devices given below

| S.NO | Device | Model Name | Qty. |
|--------------|--------|------------|------|
| 1. PC | | PC | 6 |
| 2. | Switch | PT-Switch | 3 |
| 3. | Router | PT-Router | 3 |

• Step 2: IP Addressing Table For PCs:

| S.NO | Device | IPv4 Address | Subnet Mask | Default Gateway |
|------|--------|--------------|---------------|--------------------|
| 1. | PC0 | 192.168.10.2 | 255.255.255.0 | 192.168.10.1 |
| 2. | PC1 | 192.168.10.3 | 255.255.255.0 | 192.168.10.1 |
| 3. | PC2 | 192.168.20.2 | 255.255.255.0 | 192.168.20.1 |
| 4. | PC3 | 192.168.20.3 | 255.255.255.0 | 192.168.20.1 |
| 5. | PC4 | 192.168.30.2 | 255.255.255.0 | 192.168.30.1 |

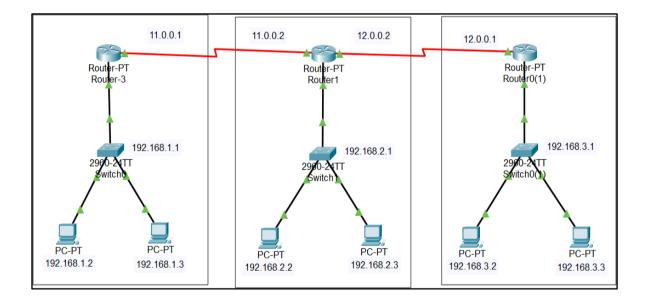


Semester 5th | Practical Assignment | Computer Networks (2301CS501)

Date: 12/9/24

| S.NO | Device | IPv4 Address | Subnet Mask | Default Gateway |
|------|--------|--------------|---------------|--------------------|
| 6. | PC5 | 192.168.30.3 | 255.255.255.0 | 192.168.30.1 |

- **Step 3:** Then, create a network topology as shown below the image.
- Step 4: Use an Automatic connecting cable to connect the devices with others.





Semester 5th | Practical Assignment | Computer Networks (2301CS501)

Date: 12/9/24

