**Lab2**

**Wide Area Network (WAN).**

**LAN ONE.**

* **Three PCs**
* **One Switch**
* **Basic IP Configuration**
* **Testing connectivity using ping**

**Lab Steps: Setting Up a Simple LAN**

**Step 1: Open Cisco Packet Tracer**

Launch Cisco Packet Tracer and create a new project.

**Step 2: Add Network Devices**

Drag and drop the following devices onto the workspace:

1 x Switch

3 x PC (PC-0 to PC-3)

**Step 3: Connect the Devices**

Use Copper Straight-Through Cables to connect:

PC-0 to Switch (**FastEthernet0**) and Switches 2950-24 (**FastEthernet0/1**)

PC-1 to Switch (**FastEthernet0**) and Switches 2950-24 (**FastEthernet0/2**)

PC-2 to Switch (**FastEthernet0**) and Switches 2950-24 (**FastEthernet0/3**)

**Step 4: Assign IP Addresses to PCs**

**Click on PC-0** → Go to Desktop → Open IP Configuration:

**IP Address:** 192.11.1.1

**Subnet Mask:** 255.255.255.0

**Click on PC-1**

**IP Address:** 192.11.1.2

**Subnet Mask:** 255.255.255.0

**Click on PC-2**

**IP Address:** 192.11.1.3

**Subnet Mask:** 255.255.255.0

**LAN TWO.**

* **Three PCs**
* **One Switch**
* **Basic IP Configuration**
* **Testing connectivity using ping**

**Lab Steps: Setting Up a Simple LAN**

**Step 1: Open Cisco Packet Tracer**

Launch Cisco Packet Tracer and create a new project.

**Step 2: Add Network Devices**

Drag and drop the following devices onto the workspace:

1 x Switch

3 x PC (PC-0 to PC-3)

**Step 3: Connect the Devices**

Use Copper Straight-Through Cables to connect:

PC-0 to Switch (**FastEthernet0**) and Switches 2950-24 (**FastEthernet0/1**)

PC-1 to Switch (**FastEthernet0**) and Switches 2950-24 (**FastEthernet0/2**)

PC-2 to Switch (**FastEthernet0**) and Switches 2950-24 (**FastEthernet0/3**)

**Step 4: Assign IP Addresses to PCs**

**Click on PC-0** → Go to Desktop → Open IP Configuration:

**IP Address:** 172.16.0.1

**Subnet Mask:** 255.255.0.0

**Click on PC-1**

**IP Address:** 172.16.0.2

**Subnet Mask:** 255.255.0.0

**Click on PC-2**

**IP Address:** 172.16.0.3

**Subnet Mask:** 255.255.0.0

**SO WE NOW WE CONMECTED BOTH TWO LABS LAB ONE AND LAB TWO.**

**To connected the two labs we use Router connects different networks and directs data between them.**

We give router two ip address by providing them with the holes they are connected to in networks.

1. **Ip address comes LAN ONE.** (**FastEthernet0)** 192.11.1.4. Make sure is on this port.
2. **Ip address Comes LAN TWO.** (**FastEthernet1)** 172.16.0.4. Make sure is on this port.

This ip address you give router was called Default Gateway.

**LAN ONE.**

* Now Go back to your network and open each PC and type the following.
* **Click on PC-0** → Go to Desktop → Open IP Configuration.
* **Default Gateway**: 192.11.1.4.

LAN TWO.

* Now Go back to your network and open each PC and type the following**.**
* **Click on PC-0** → Go to Desktop → Open IP Configuration.
* **Default Gateway**: 172.16.0.4.

Test it using this Command.

Open one pc in network land one.

**Click on PC-0** → Go to Desktop → Command Prompt.

Write Ping 192.11.1.4.