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**Vellore Institute of Technology**  
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# **LAB ASSESSMENT-1**

**SLOT: L49-L50**

## **CSE 3502: INFORMATION SECURITY MANAGEMENT**

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## **Experiment1: CONNECTING TWO VLANS BY SWITCHES**

### **Aim:**

The goal of this project is to use switches to join two LANS.

### **Procedure:**

#### **STEP 1: PC/ Computer Configuration:**

PC1 : 192.168.1.1

PC2 : 192.168.1.2

PC3 : 192.168.1.3

PC4 : 192.168.1.4

#### **STEP 2: Switch 1 Configuration:**

```
switch>en
```

```
switch>conf t
```

```
switch (config)# interfce vlan1
```

```
switch (config-if)# ip address 10.0.0.1 255.0.0.0
```

```
switch (config-if)# no shut
```

```
#exit
```

#### **STEP 3: Switch 2 configuration:**

```
switch>en
```

```
switch>conf t
```

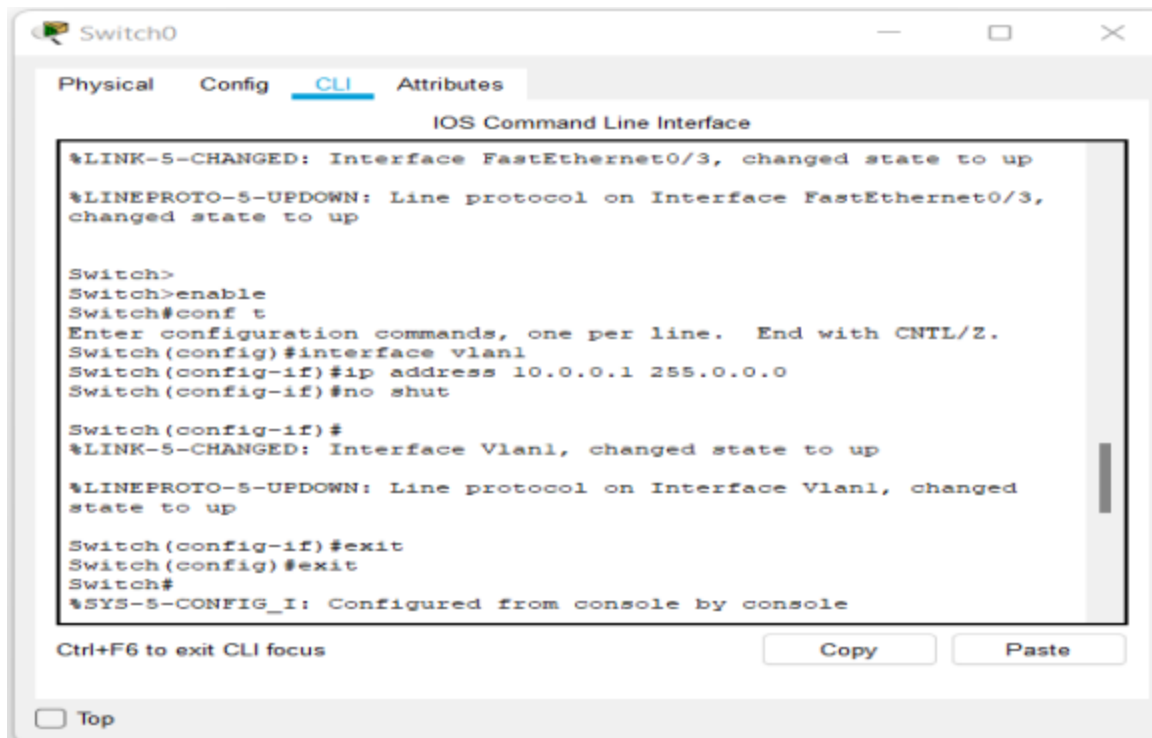
```
switch (config)# interfce vlan2
```

```
switch (config-if) # ip address 10.0.0.2 255.0.0.0
```

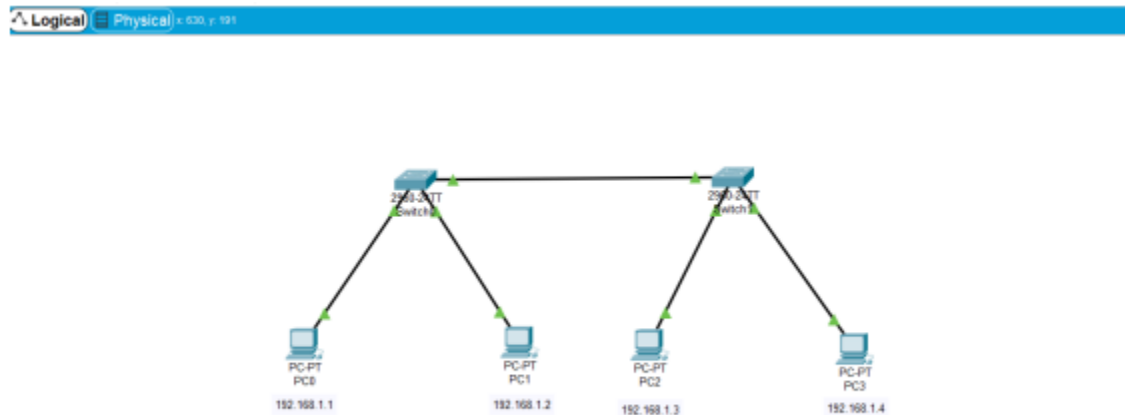
```
switch (config-if)# no shut
```

```
#exit
```

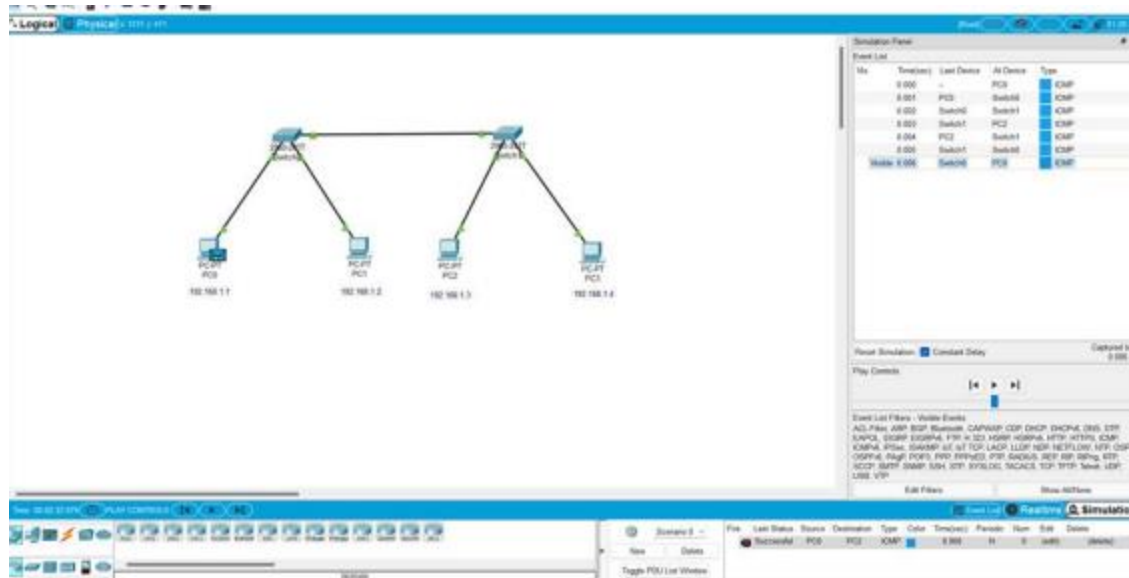
### **CLI:**



## Design:



## Simulation and Result:



## Conclusion:

We may deduce from the above simulation and outcome that there is a switch connection between two LANs.

## Experiment 2: CONNECTING TWO NETWORKS USING A ROUTER.

### Aim:

The goal of the experiment is to use a Router to link two networks.

### Procedure:

#### STEP 1: Router Configuration:

```
Router>en
```

```
Router>enable
```

```
Router>conf
```

```
Router (config) #interface gigabitEthernet 0/0
```

```
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 gigabitEthernet 0/1
```

```
Router (config-if) #ip address 192.168.2.1 255.255.255.0
```

```
Router (config-if) #no shutdown
```

## STEP 2: PC Configuration:

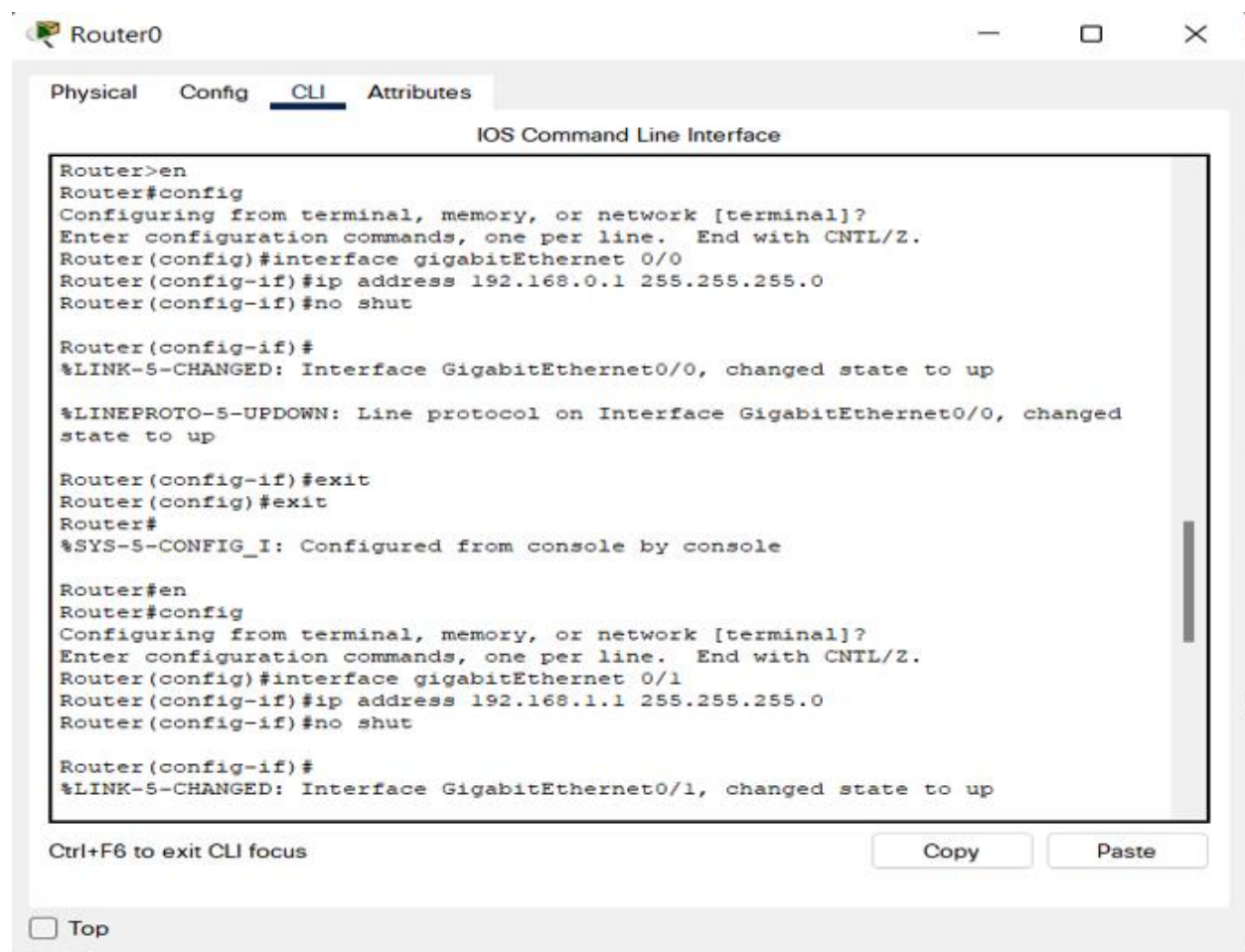
Give addresses for PCs in Network1 as: 192.168.1.11 to 192.168.1.13

Give addresses for PCs in Network2 as: 192.168.2.11 to 192.168.2.13

Set default gateway for the leftside network as 192.168.1.1

Set default gateway for the leftside network as 192.168.2.1 edure:

## CLI:



```
Router0
Physical Config CLI Attributes
IOS Command Line Interface

Router>en
Router#config
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface gigabitEthernet 0/0
Router(config-if)#ip address 192.168.0.1 255.255.255.0
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed
state to up

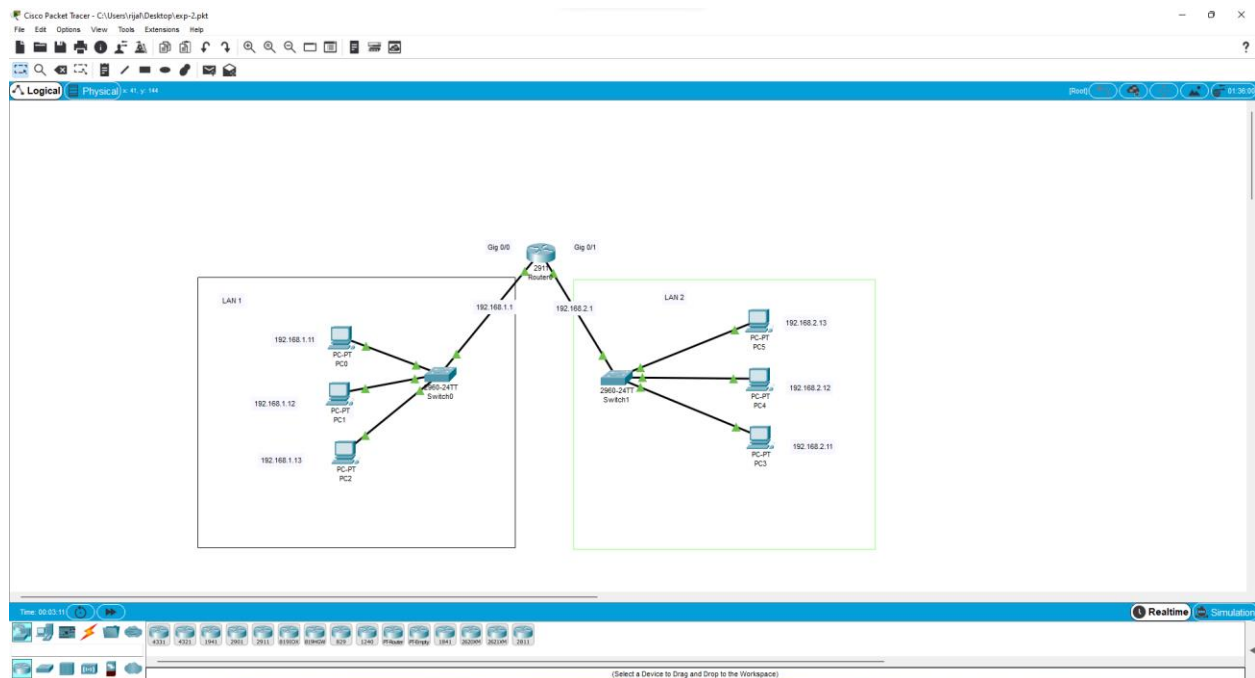
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#en
Router#config
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface gigabitEthernet 0/1
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shut

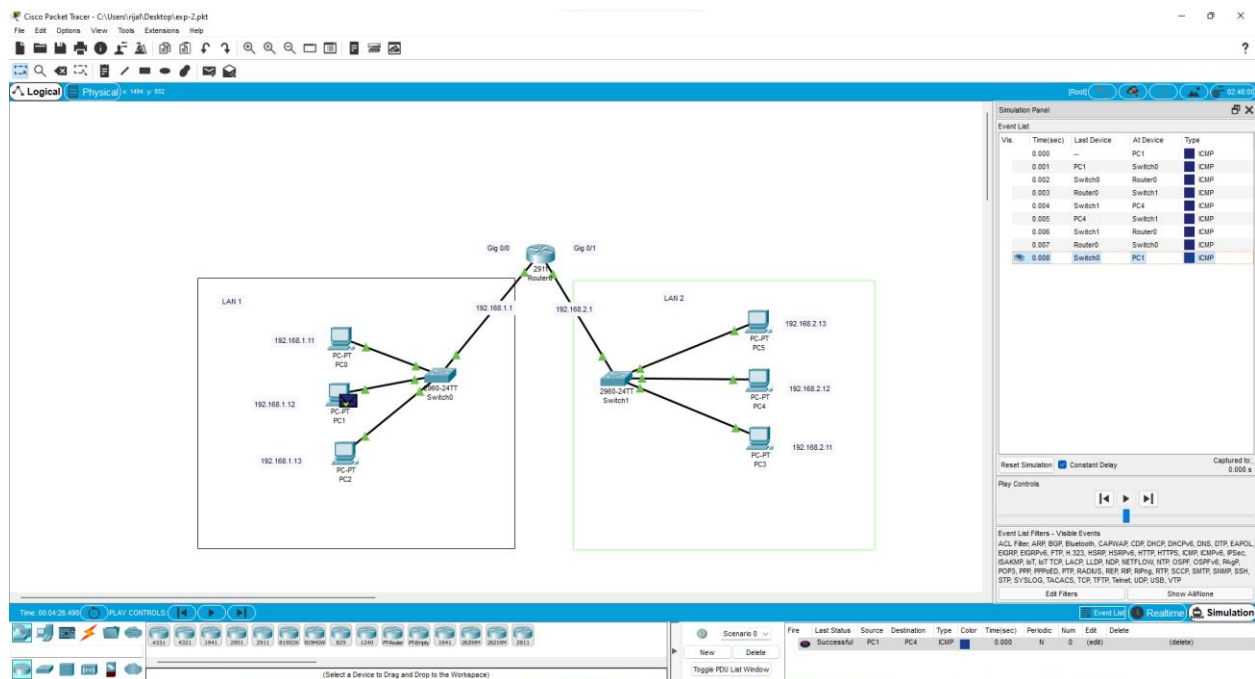
Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

Ctrl+F6 to exit CLI focus
Copy Paste
Top
```

## Design:



## Simulation and Result:



## Conclusion:

We may deduce from the above simulation and result that there is a Router link between two networks.