

## **CN Lab Experiment 2**

### **Objective:**

- To Learn the different types of network topology.
- To set up the different topologies
- To study different types of network cables and their colour codes.
- To document the observations and save the configuration file in a GitHub repository.

### **Requirements:**

- Cisco Packet Tracer software.
- A GitHub account and a repository for lab assignments.
- Access to Google Classroom for submission.

### **Procedure:**

#### 1. Open Packet Tracer:

- Launch Cisco Packet Tracer on your computer.

#### 2. Implement a Bus Topology:

- Drag three computers onto the workspace.
- Connect them using a single backbone cable (Coaxial Cable).

#### 3. Implement a Star Topology:

- Drag three computers and a switch onto the workspace.
- Connect each computer to the switch using straight-through Ethernet cables.

#### 4. Implement a Ring Topology:

- Drag three computers onto the workspace.
- Connect them in a circular manner using crossover cables.

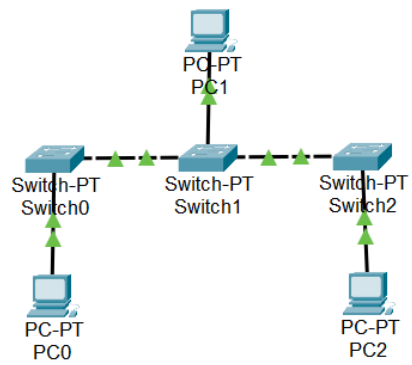
#### 5. Implement a Mesh Topology:

- Drag three computers onto the workspace.
- Connect each computer to every other computer using crossover cables.

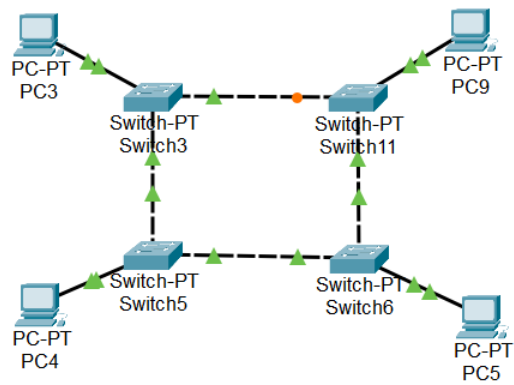
#### 6. Test Connectivity:

- For each topology, assign IP addresses to the computers.
- Use the ping command to test connectivity between all computers.

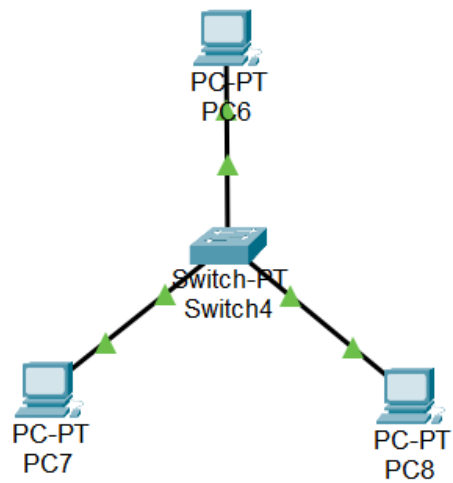
### Bus Topology:



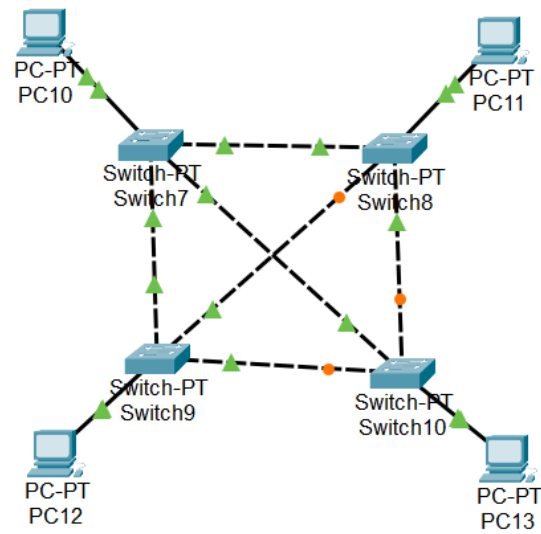
### Ring Topology:



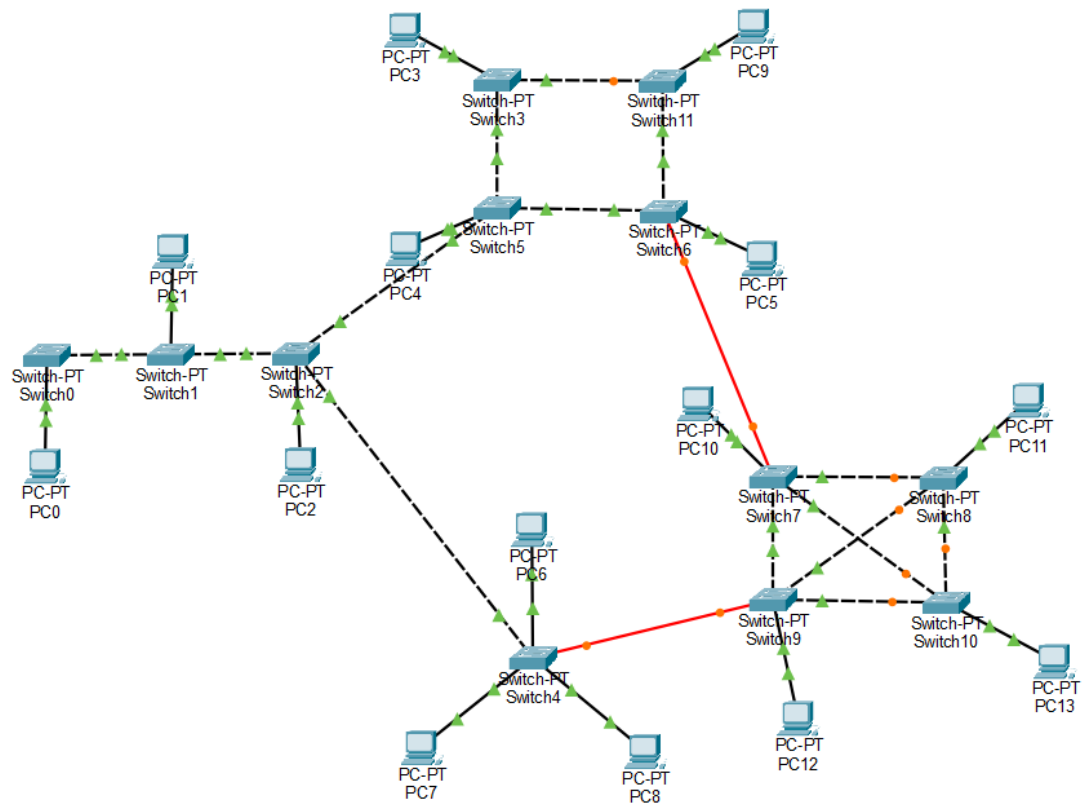
### Star Topology:



### Mesh Topology:



### Hybrid Topology:



### Result:

Different types of Network Topology were learned.