EXPERIMENT NO. 5

Aim :- To build a simple network topology and configure it for static routing protocol using packet tracer. Setup a network and configure IP addressing, subnetting, masking.

Theory :-

Cisco Packet Tracer is a cross-platform visual simulation tool designed by Cisco Systems that allows user to create network topologies and imitate modern computer networks. The software allows users to simulate the configuration of Cisco routers and switches using a simulated command line interface. CPT uses a drag and drop user interface, allowing users to add and remove simulated network devices as they see fit. The software is used to allow the users to create simulated network topologies by dragging and dropping routers, switches and various other types of network devices.

Cisco Packet Tracer allows users to simulate and experiment with computer networks without the need for physical hardware.
It provides a virtual environment where users can create and configure networks, devices, and protocols.

The tool includes a wide range of Cisco networking devices such as routers, switches and access points. Cisco Packet Tracer supports various networking protocols and services, including TCP/IP, DHCP, DNS, FTP, HTTP and more. Users can configure and test these protocols in a controlled environment.
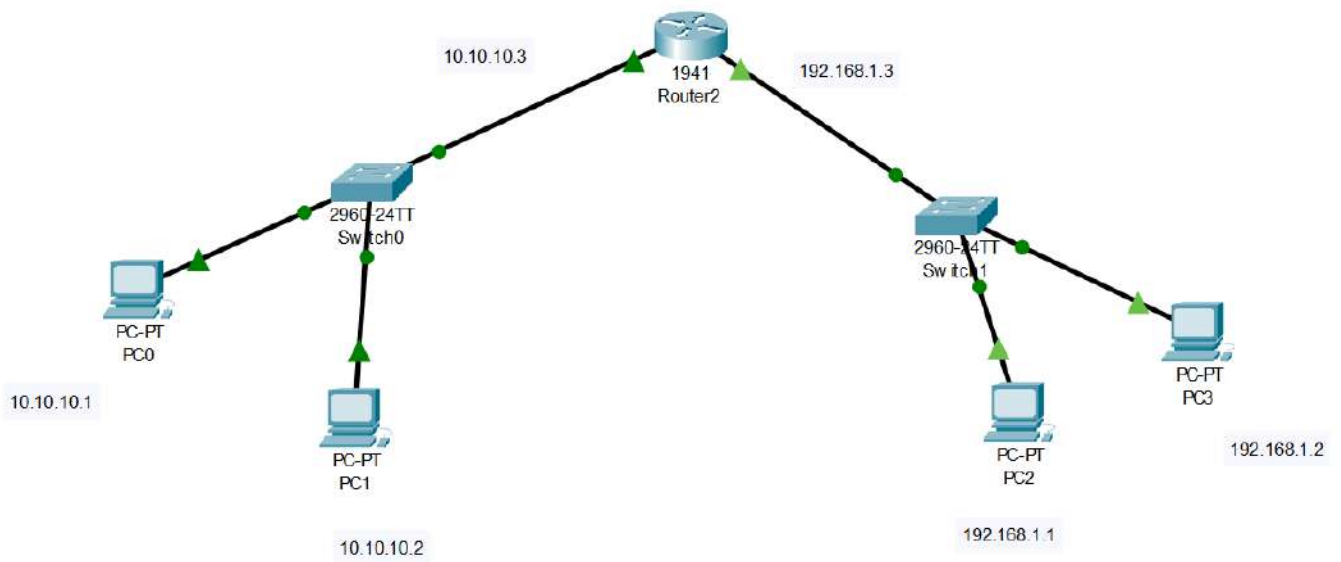
Users can design complex network topologies by connecting devices and creating virtual LANs (VLANs). It is a valuable tool to plan and visualize network designs.
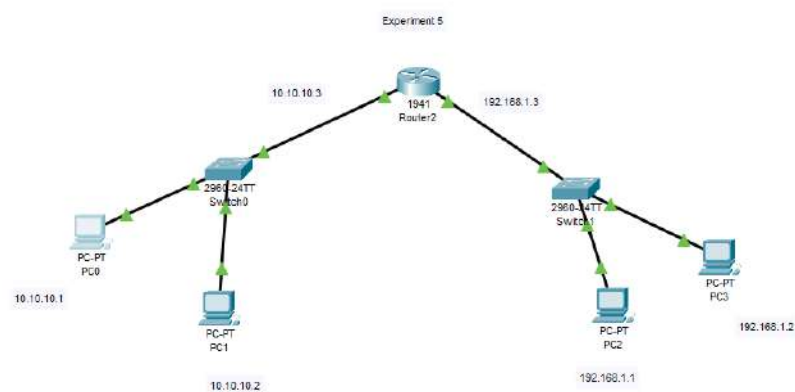
18/9/23

Experiment 5

10.10.10.3

192.168.1.3

1941
Router2

2960-24TT
Switch0

2960-24TT
Switch1

PC-PT
PC0

PC-PT
PC1

PC-PT
PC2

PC-PT
PC3

10.10.10.1

10.10.10.2

192.168.1.1

192.168.1.2

Experiment 5

10.10.10.3   192.168.1.3

1941
Router2

2960-24TT
Switch0

2960-24TT
Switch1

PC-PT
PC0

PC-PT
PC1

PC-PT
PC2

PC-PT
PC3

10.10.10.1

10.10.10.2

192.168.1.1

192.168.1.2

PC0

Physical   Config   Desktop   Programming   Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ipconfig

FastEthernet0 Connection:(default port)

   Connection-specific DNS Suffix..:
   Link-local IPv6 Address.........: FE80::2E0:A3FF:FEE4:B9CB
   IPv6 Address....................: ::
   IPv4 Address....................: 10.10.10.1
   Subnet Mask.....................: 255.0.0.0
   Default Gateway.................:
                                     10.10.10.3

Bluetooth Connection:

   Connection-specific DNS Suffix..:
   Link-local IPv6 Address.........: ::
   IPv6 Address....................: ::
   IPv4 Address....................: 0.0.0.0
   Subnet Mask.....................: 0.0.0.0
   Default Gateway.................: ::
                                     0.0.0.0

C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Request timed out.
Reply from 192.168.1.1: bytes=32 time<1ms TTL=127
Reply from 192.168.1.1: bytes=32 time<1ms TTL=127
Reply from 192.168.1.1: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```