

Configuration of Network devices using packet tracer.

1. Configuration of Network devices using packet tracer.

Aim: To identify the configuration of network device using packet tracer(Hub,switch Ethernet, broadcast).

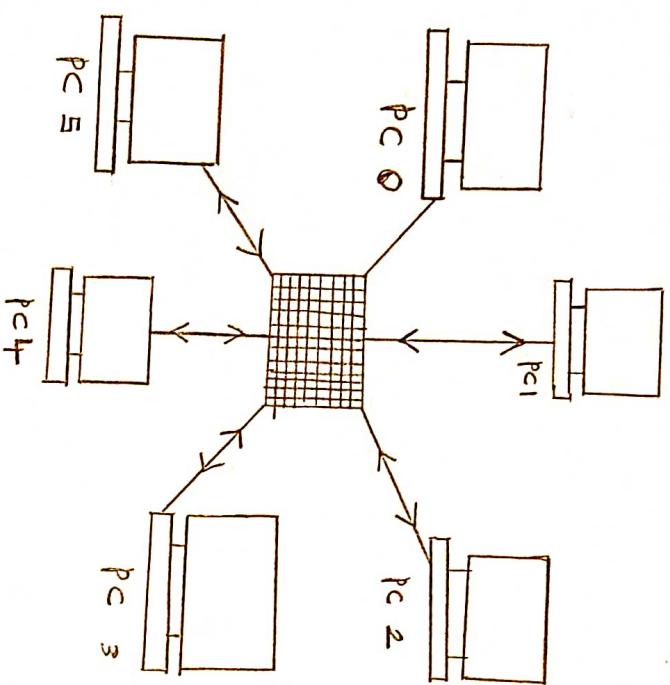
Materials Required: personal computer, packet tracer.

Procedure:

- * Taking an Hub , pc, connecting wires.
- * We have to first insert an Hub & were giving an data.
- * And inserting pc's & giving IP address to the pc's at configuration.
- * While giving IP address by choosing an Internet to Ethernet.
- * Giving connections to the pc's & Hub were giving message to the one pc to another pc.
- * Verifying output.

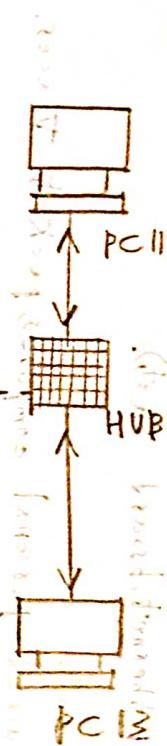
Result :

The configuration of Network device using packet tracer was written successfully.

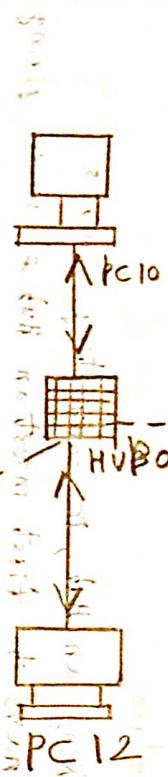


2. Configuration of topology (star, Mesh, Tree):

Aim: To understand different types of network topologies using packet tracer (star, Mesh, Tree).



personal computer packet tracer



tracking an Hub , PC , 2960 switches & inserting.

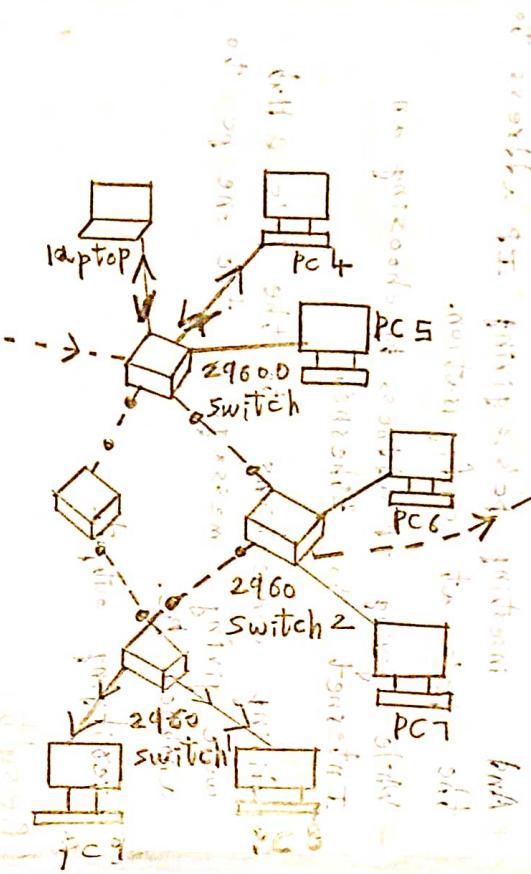
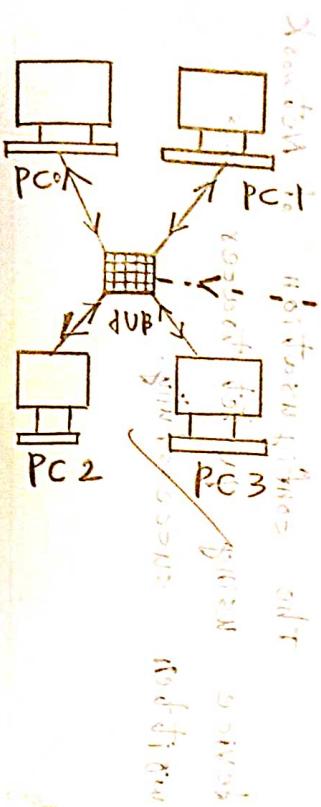
First inserted an Hub & were giving an data And were inserting PCs & 2960 switches & also connecting to the Hub in star, Mesh, tree shape.

while giving an IP address by choosing the type of the configuration.

And have to verifying an output.

Result:

The configuration of Topologies using packet tracer (star, mesh, tree) as verified successfully.

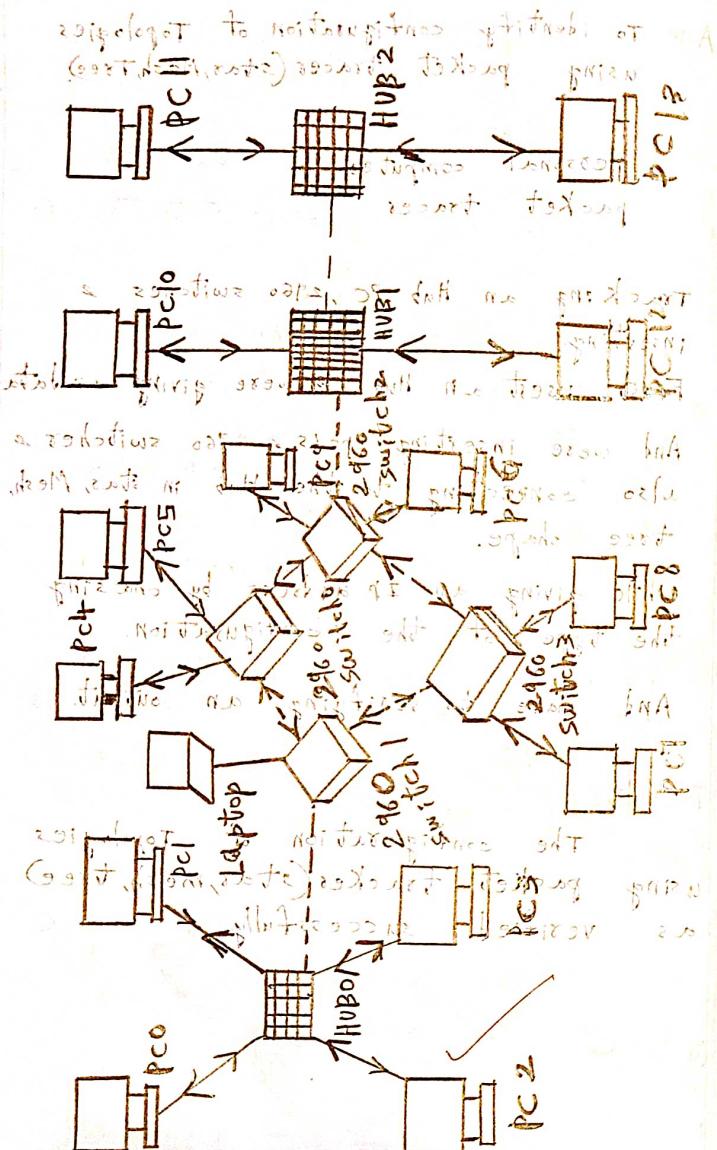


Configuration of Topology (star, Mesh, tree)

Aim: To identify configuration of Topologies using packet tracer (star, Mesh, Tree).

personal computer packet tracer

3. Topologies Using Tracer (Bus, Ring, hybrid)



3. Topology using Tracer (Bus, Ring, hybrid)

Aim: To identify an configuration of Topologies using packet tracer (Bus, Ring, Hybrid).

Materials Required :

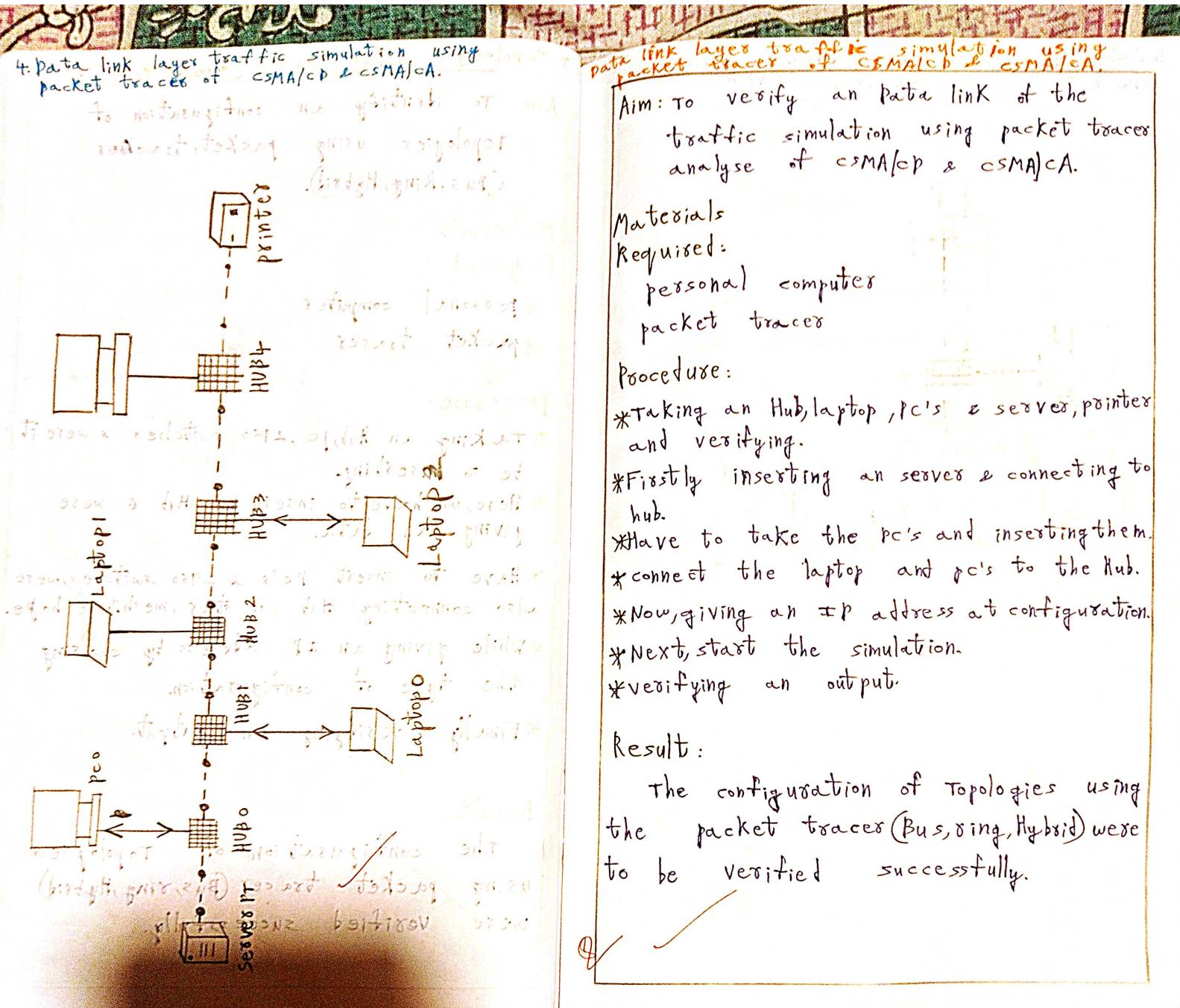
- * personal computer
- * packet tracer

procedure:

- * Taking an Hub, pc, 2960 switches & were it be so inserting.
- * Here, we have to insert an Hub & were giving an data.
- * Have to insert pc's & 2960 switches, were also connecting Hub in star, mesh,tree shape.
- * While giving an IP address by choosing the type of configuration.
- * Finally verifying an output.

Result:

- ⑧ The configuration of Topologies using packet tracer (Bus, Ring, Hybrid) were verified successfully.



5. Data link layer traffic simulation using packet traces analysis of ARP

most finding give noticeable different
Arp has a problem to efficient
functioning of network.
Arp is a protocol that is used to
find the location of destination
server IP address (source
route tracing)
Arp is a protocol that is used to
find the location of destination
server IP address (source
route tracing)

```

graph TD
    Server[Server PT] --> Hub[HUB PT]
    Hub --> PC1[PC1]
    Hub --> PC2[PC2]
    
```

Data link layer traffic simulation using packet traces analysis of ARP

Aim: To verify an data link transfer simulation using packet traces

Analysis of ARP.

Materials Required:

- personal computer
- packet traces.

Procedure:

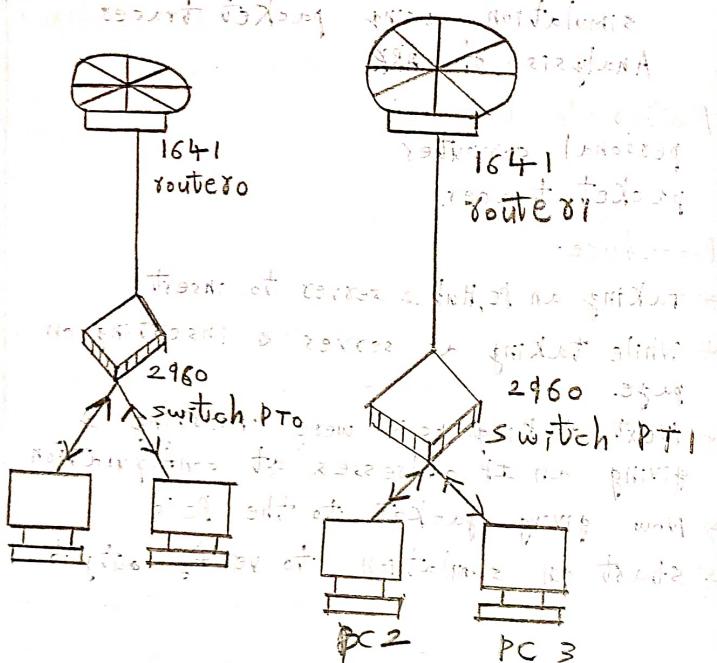
- * Taking an PC, Hub & server to insert
- * While taking an server & inserting on page.
- * Next taking pc's were inserting & giving an IP addresses at configuration
- * Now giving packet to the pc's.
- * Start an simulation to verify output.

Result:

The data link transfer simulation using packet traces Analysis for ARP is to verify successfully.

6: Static Routing using packet tracer

After taking any type of
any router existing in the network.



static Routing using packet tracer

Aim: To verify an static routing using the packet tracer.

Materials required:
personal computer
packet tracer.

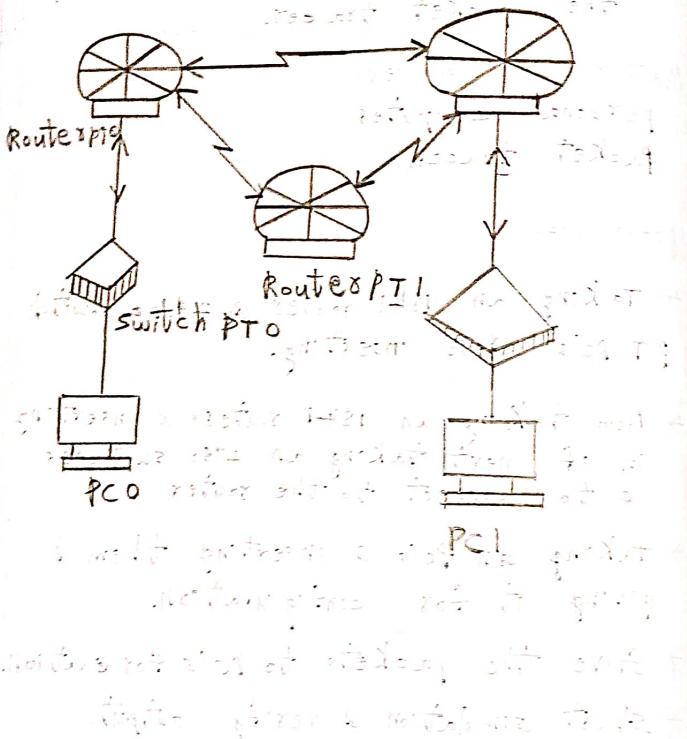
procedure:

- * Taking an 1841 routers & 2960 switch PT, pc's were inserting.
- * Now taking an 1841 routers & inserting in if next taking an 2960 switches to connect to the router.
- * taking an pc's & inserting them & giving it for configuration.
- * Give the packets to pc's for execution.
- * Start simulation & verify output.

Result:

static routing using packet tracer was verified successfully

7. Dynamic Routing using packet tracer



Dynamic Routing using packet tracer

Aim: To verify an Dynamic routing using packet tracer(OSPF).

Materials Required:
personal computer
packet tracer

procedure:

- * We're taking an = routine & 2 switch PT's & pc's to be inserted.
- * Next inserting an = router & connected b/w the = routers.
- * Now inserting an 2 switch PT's & connected to the routers.
- * Next inserting pc's & giving configuration of the IP address.
- * Now giving packets to the pc's.
- * start simulation to verify output.

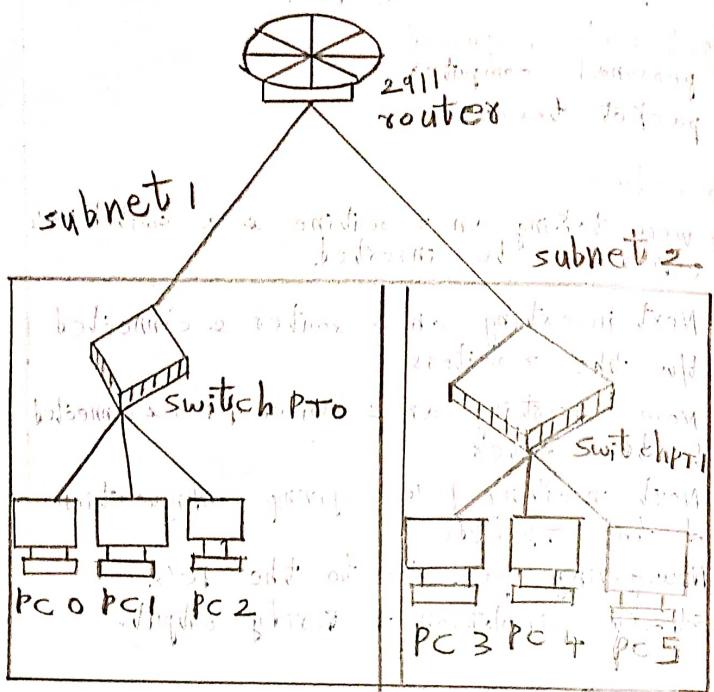
Result:

An Dynamic routing using packet tracer was verified successfully.



8. Subnetting - class C Addressing

Given two subnets are present in a single class C addressing.



Subnetting - class C Addressing

Aim: To verify an subnetting in class C and also Addressing.

Materials Required:

- personal computer
- packet tracer

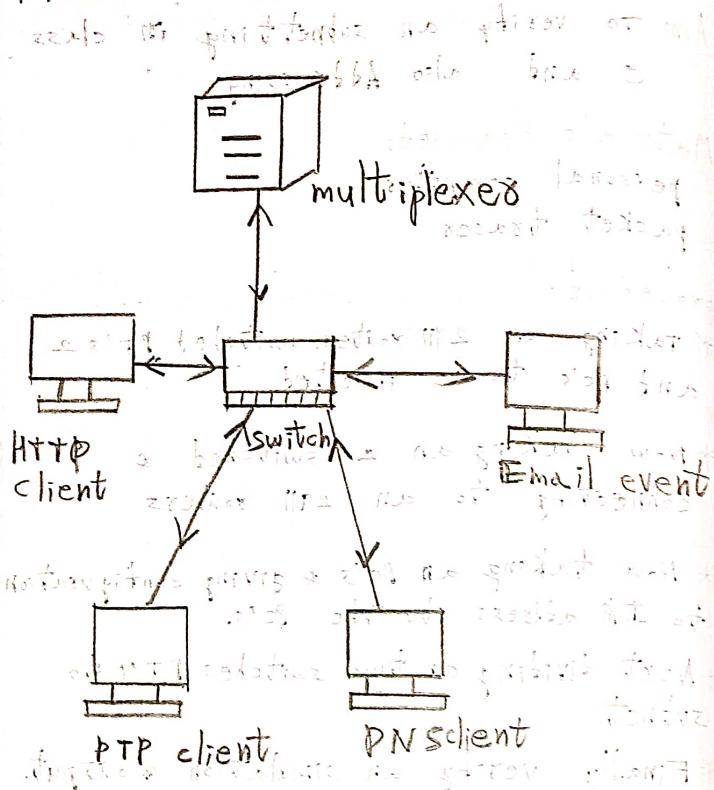
procedure:

- * Taking an 2911 routers, switched PT's & and pc's to be inserted.
- * Now taking an 2 switched & connecting to an 2911 routers.
- * Now taking an pc's & giving configuration to IP address to the pc's.
- * Next dividing an two switches PT's to subnets.
- * Finally verify an simulation & output.

Result:

The subnetting in class C Addressing were verified successfully.

9. functionalities of TCP, UDP.



functionalities of TCP, UDP

Aim: To verify the functionalities of TCP and UDP.

Materials Required:
personal computer
packet tracer

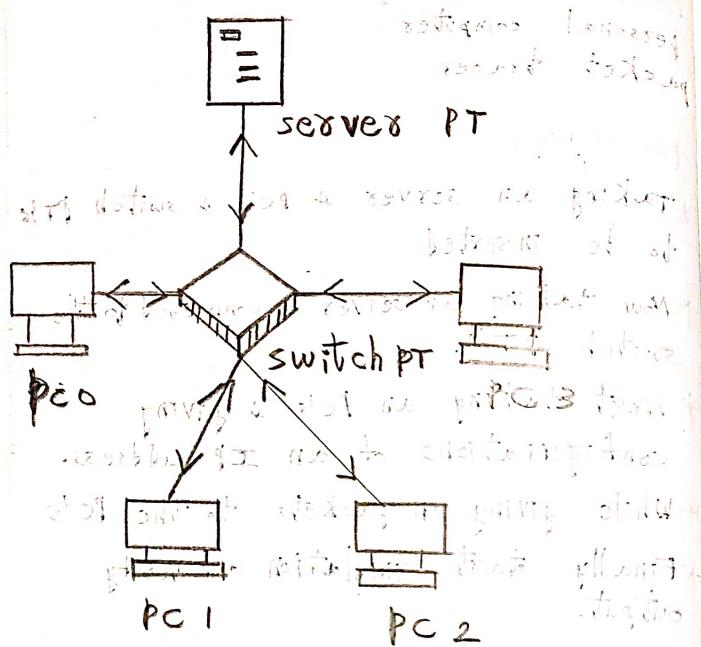
procedure:

- * Taking an server & PC's & switch PT to be inserted.
- * Now taking an server & connected to the switch PT.
- * Next taking an PC's & giving configurations of an IP address.
- * While giving an packets to the PC's
- * Finally start simulation and verify output.

Result:

The functionalities of TCP and UDP are successfully verified.

10. TCP UDP Exploration Solution



TCP UDP Exploration solution

Aim: To verify an TCP, UDP exploration of the solution.

Materials required:
personal computer
packet traces

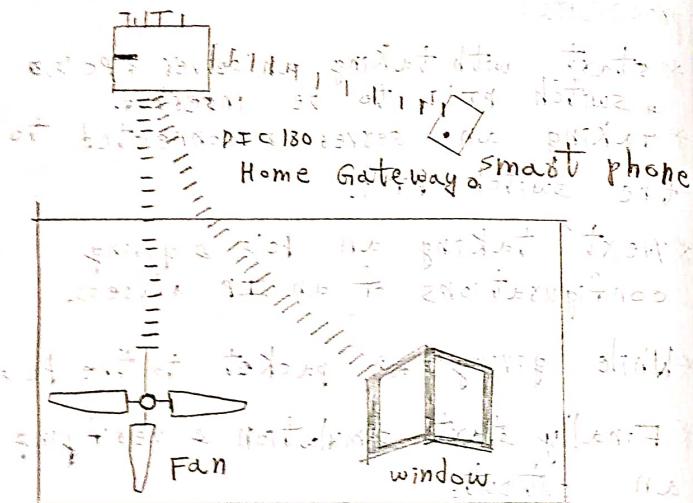
procedure:

- * start with taking an server & PC's
- ↳ switch PT's to be inserted
- * taking an server & connected to the switch - PT's.
- * Next, taking an PC's & giving configurations of an IP address.
- * While giving an packet to the PC's.
- * Finally start simulation & verifying an output.

Result:

The TCP, UDP exploration solution was verified successfully.

II. IOT Based smart home using Cisco packet tracer at middle school



IOT Based smart home using Cisco packet tracer

Aim: To identify IOT based smart home using Cisco packet tracer.

Materials required:

personal computer
packet tracer

procedure:

* Taking an PEC 100 Home gateway or fan ceiling window & smart phone PT.

* Next taking an Home gateway & were be connecting a fan ceiling & window.

* Now giving an IP address configuration to the smart phone. PT.

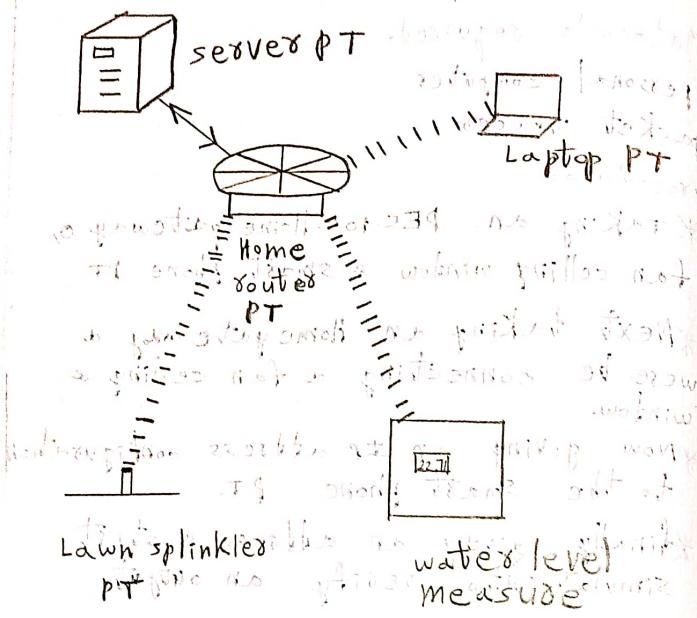
* finally giving an address & start simulation to verify an output.

Result: the IOT based smart Home using Cisco packet tracer were verified successfully.



12. Smart Garden in cisco packet tracer

From board TOT project of
Router setting & its output smart



Smart Garden in cisco packet tracer

Aim: To verify an smart Garden in Cisco packet tracer.

Materials required:
personal computer
packet tracer.

procedure:

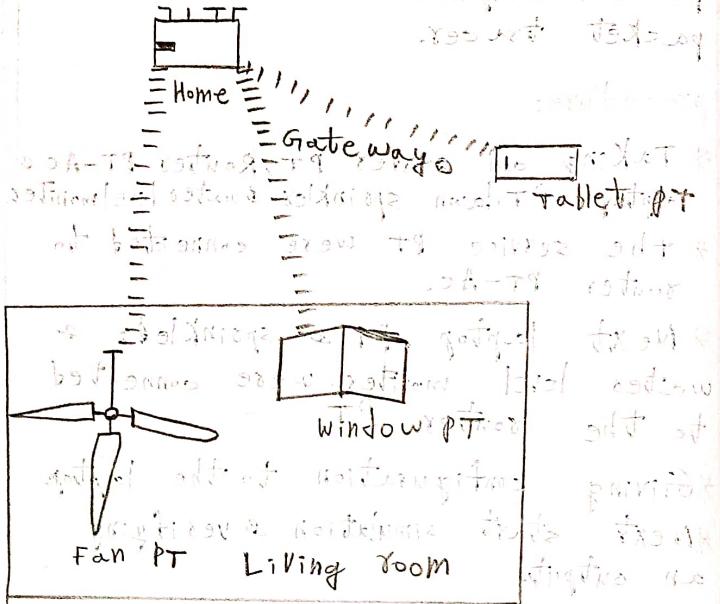
- *Taking an server PT, Router PT-Ac & laptop PT, lawn sprinklers & water level monitor.
- *the service PT were connected to router PT-Ac.
- *Next laptop PT & sprinklers & water level monitor were connected to the router PT.
- *Giving configuration to the laptop.
- *Next start simulation & verifying an output.

Result:

The smart Garden in cisco packet tracer was successfully verified.

✓

13. IOT devices in Networking using cisco packet tracer.



IOT devices in Networking using cisco packet tracer

Aim: To identify an IOT devices of the Networking using cisco packet tracer.

Materials required:

personal computer

packet tracer

Procedure:

*Taking an wireless router, fan, light lamp and server PT & Tablet PC PT.

*Now taking an wireless router & connecting all PT's as fan, light, server & tablet.

*Next giving an configuration to the tablet.

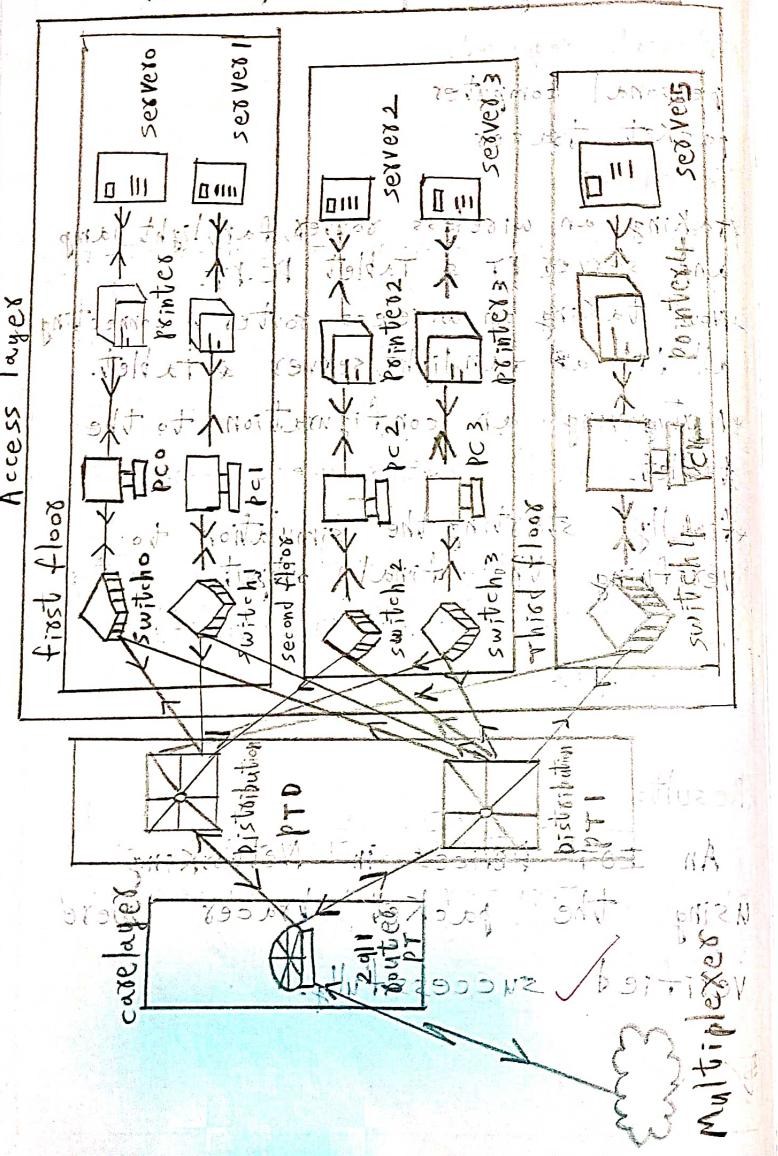
*finally starting the simulation to verifying the final output.

Result:

An IOT devices in Networking using the packet tracer were verified successfully.

14. Simulating X,Y,Z company Network

Designing, simulating & verification of a company network.



simulating X,Y,Z company Network design

Aim: To verify an simulating X,Y,Z company Network design.

personal computer
packet tracer

Taking an wireless router, fan, light lamp and server PT & tablet PC-PT.

Now taking an wireless router and connecting all PT's as fan, light, server, tablet.

Now giving an configuration to the tablet

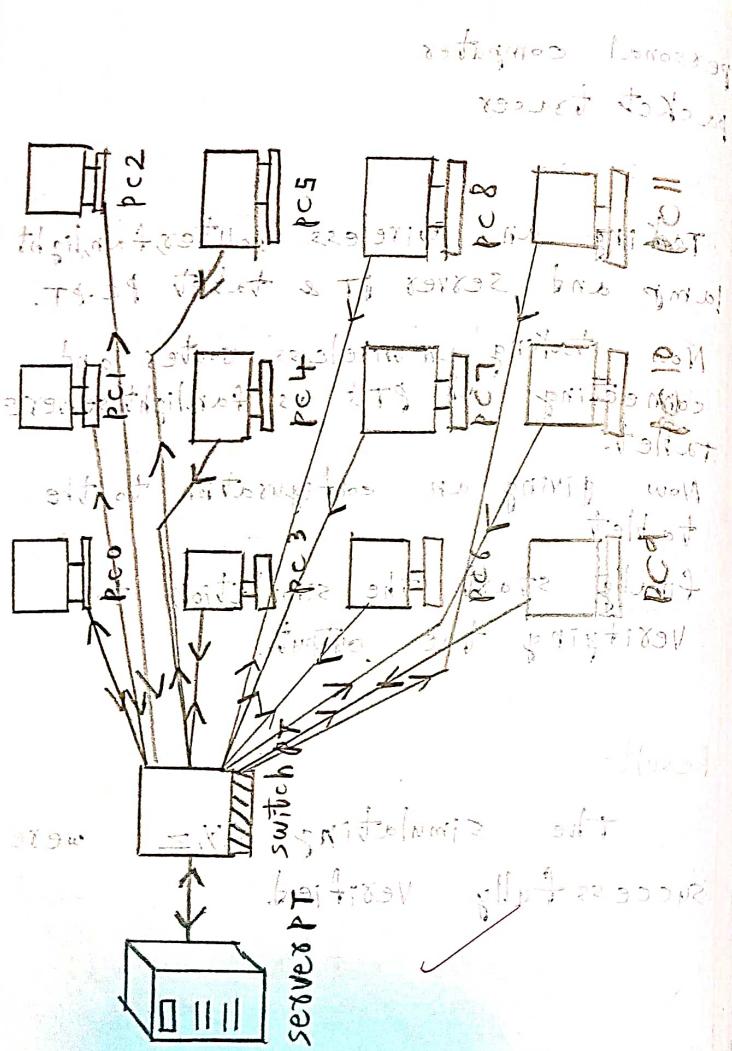
finally start the simulation to verifying the output.

Result:

The simulating X,Y,Z were successfully verified.



15. Make computer lab in cisco packet tracer



Computer lab in cisco packet tracer

Aim : To verify an make computer lab in cisco packet tracer.

Materials Required:
personal computer
packet tracer

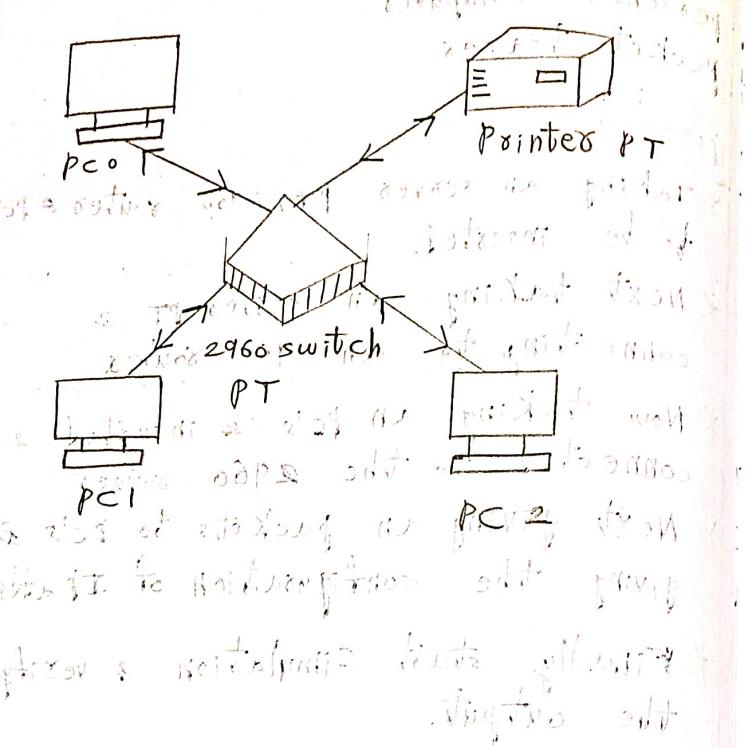
procedure:

- * Taking an server pt, 2960 router & pc to be inserted.
- * Next taking an server pt & connecting to an 2960 router.
- * Now taking an pc's & inserted & connected to the 2960 router.
- * Next giving an packets to pc's & giving the configuration of IP address.
- * Finally start simulation & verify the output.

Result:

The computer lab making in cisco packet tracer were verified successfully.

16. Simulate a multimedia Network



Simulate a multimedia Network

Aim: To verify an simulate a multimedia of the Network.

Materials required:

- personal computer
- packet tracer.

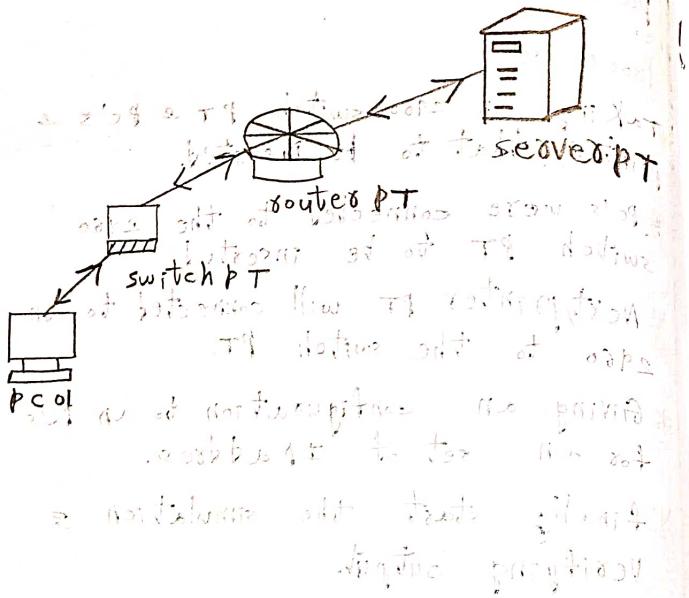
Procedure:

- *Taking an 2960 switch PT & PC's & printer that to be inserted.
- *PC's were connected to the 2960 switch PT to be inserted.
- *Next, printer PT will connected to an 2960 to the switch PT.
- *Giving an configuration to an PC's for an set of IP address.
- *finally start the simulation & verifying output.

Result:

The simulate of multimedia network was verified successfully.

17. AAA Local & server based Authentication configuration in cisco packet tracer



AAA Local & server based Authentication configuration in cisco packet tracer

Aim: To verify an AAA local & server based Authentication configuration in cisco packet.

Materials required:

personal computer
packet tracer

Procedure:

*Taking an server PT, router PT, switch PT, and pc to be inserted.

*Now server PT & router PT were connected.

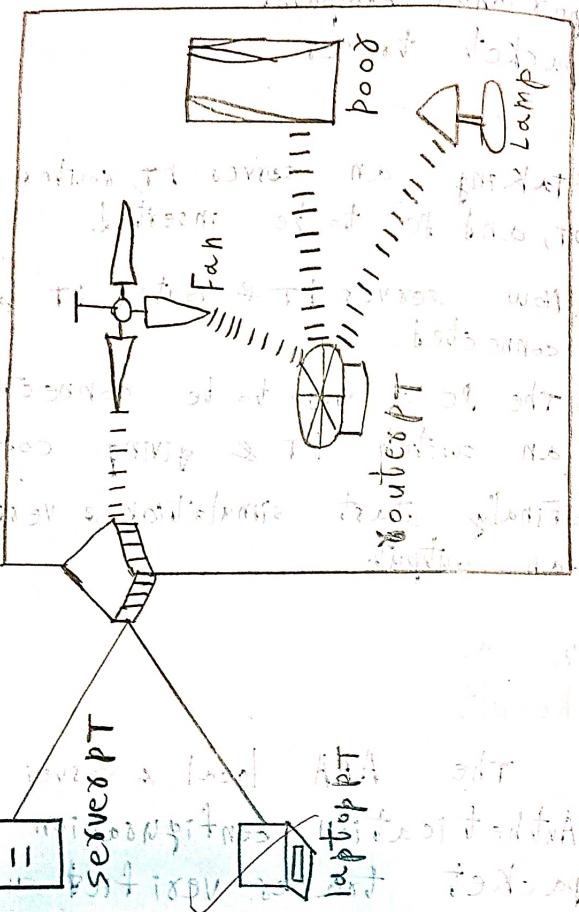
*The PC's were to be connected with an switch PT & giving configuration.

*Finally start simulation & verifying an output.

Result:

The AAA local & server based Authentication configuration in packet tracer verified successfully.

18. IoT based smart home using WPA security & Radius server.



IoT based smart home using WPA security & Radius server

Aim: To verify an IoT based smart home using WPA security & radius server.

Materials required:
personal computer.
packet tracer.

procedure:

- *Taking an server PT, laptop & switch PT, router, fan, lamp, to be inserted.

- *The switch of PT & router PT were connected to the server PT.

- *Next, giving an configuration to an laptop pt to an IP address.

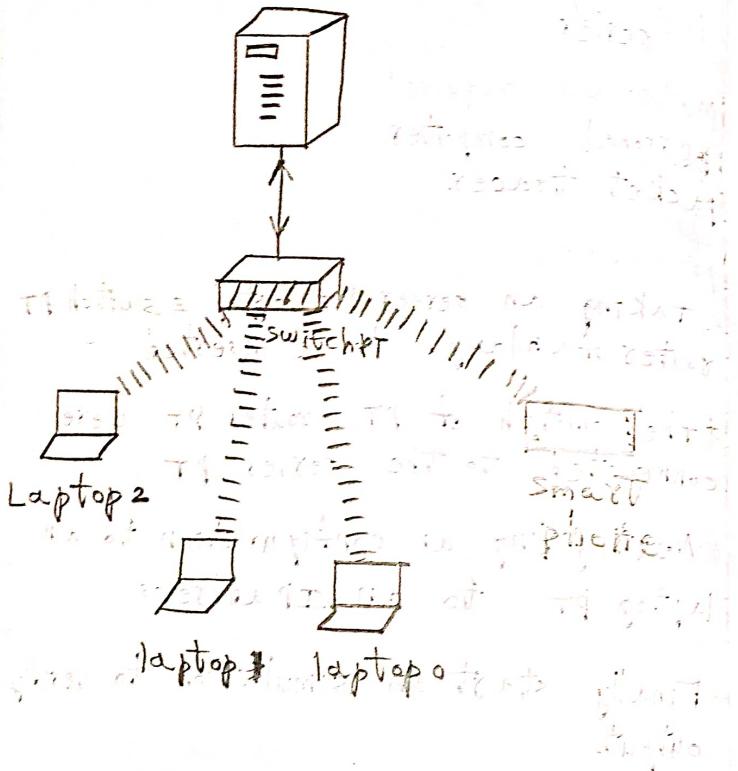
- *Finally start an simulation to verify output.

Result:

The IoT based smart Home using WPA security & radius server were verified successfully.

19. WLAN using Cisco packet tracer

Setup of WLAN using Cisco packet tracer



WLAN using Cisco packet tracer

Aim: To verify an WLAN using Cisco packet tracer.

Materials required:
personal computer
packet tracer

Procedure:

*Taking an server & Access post, smart phone & laptop to be inserted.

*while server were connected to smart access post.

*The access post connected to smart phone & laptop.

*Now, giving configuration IP address to the particular selected laptop.

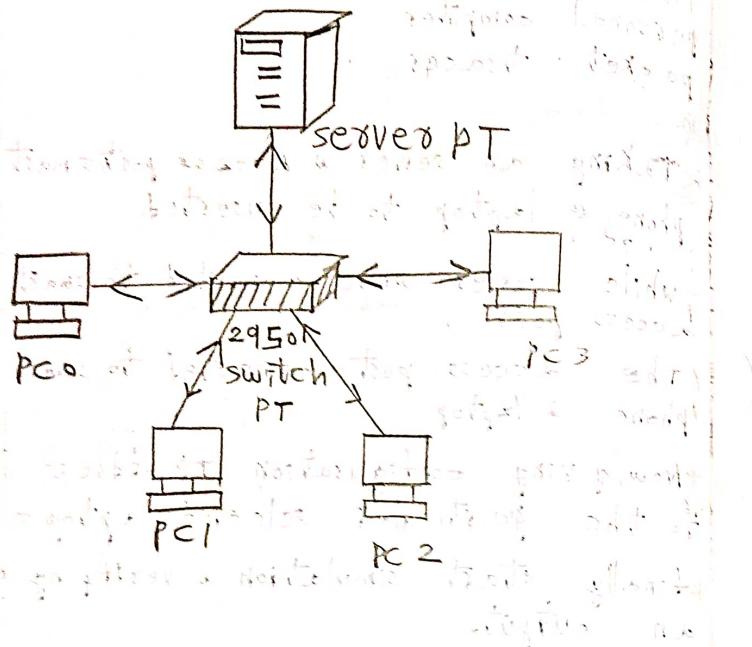
*finally start simulation & verifying an output.

Result:

The WLAN using Cisco packet tracer were verified successfully.



20. control of fan,light, window & application of using cisco packet tracer.



control of fan,light, window & application of using cisco packet tracer.
Aim: To verify an control of fan,light, window & Application of using cisco packet tracer.

Materials required:

personal computer
packet tracer.

procedure:

- * Taking an 2950 switch, server PT, pc PT to be inserted.
- * Next server were connected to an 2950 switch PT.
- * Now, switch PT were connected to an pc's were giving an configuration of IP address.
- * Next start simulation to verifying an output.

Result:

The control of fan,light, window & also for application of using cisco packet tracer is to verified successfully.