NAME-SAARA ANAND

REG NO-21BCE8156

SLOT-L23+L24

CN LAB ASSIGNMENT 3-

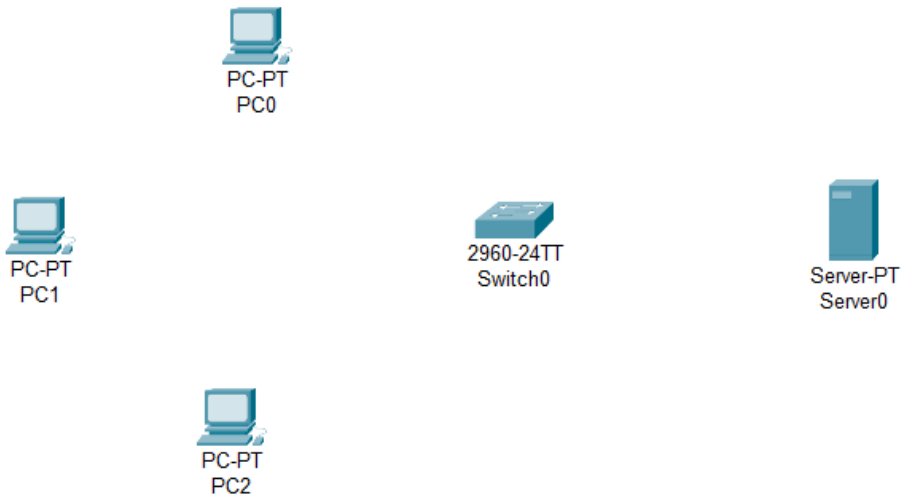
1. HOW TO CONFIGURE DNS SERVER WITH MULTIPLE WEB SITES USING THE SAME IP ADDRESS.

2. TOPOLOGY CREATION: STAR

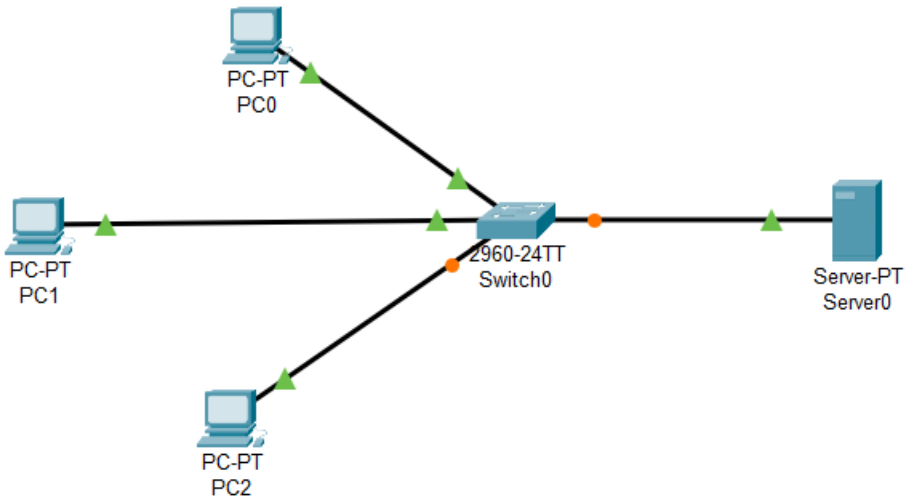
3. ANALYSIS ON DNS SERVER.

CONFIGURING DNS SERVER WITH MULTIPLE WEBSITES USING SAME IP ADDRESS-

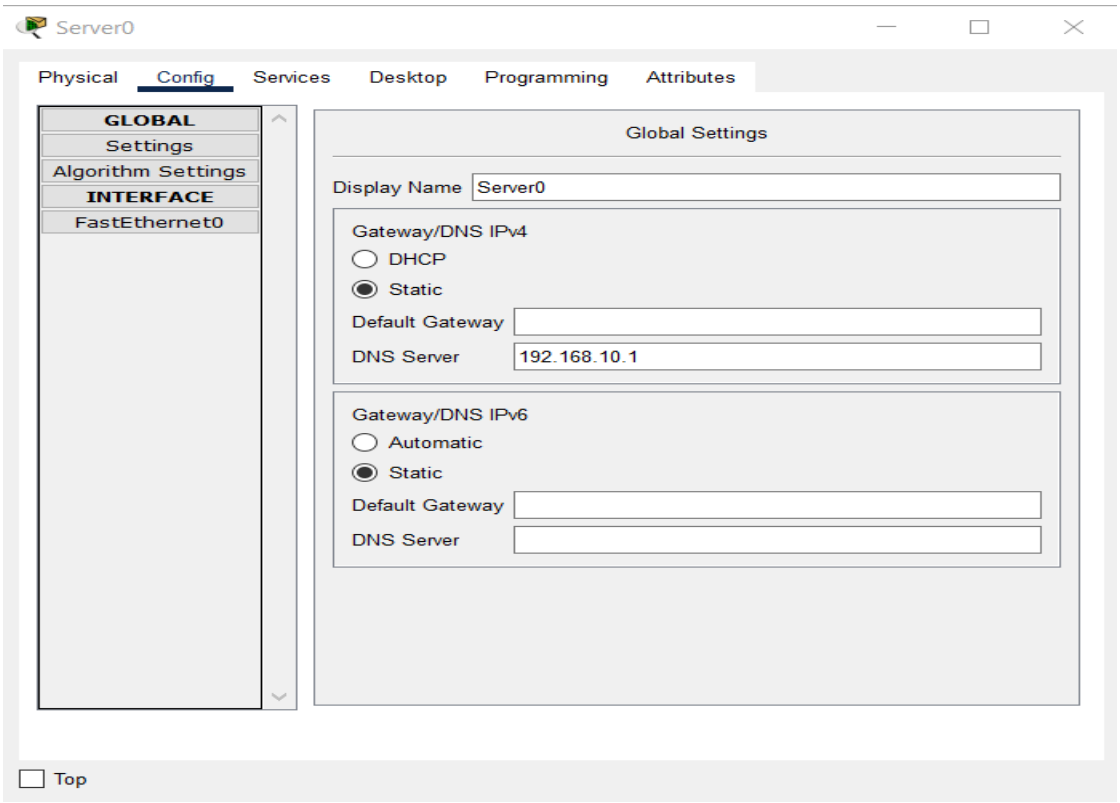
1)Place 3 PC's, a switch and a server.

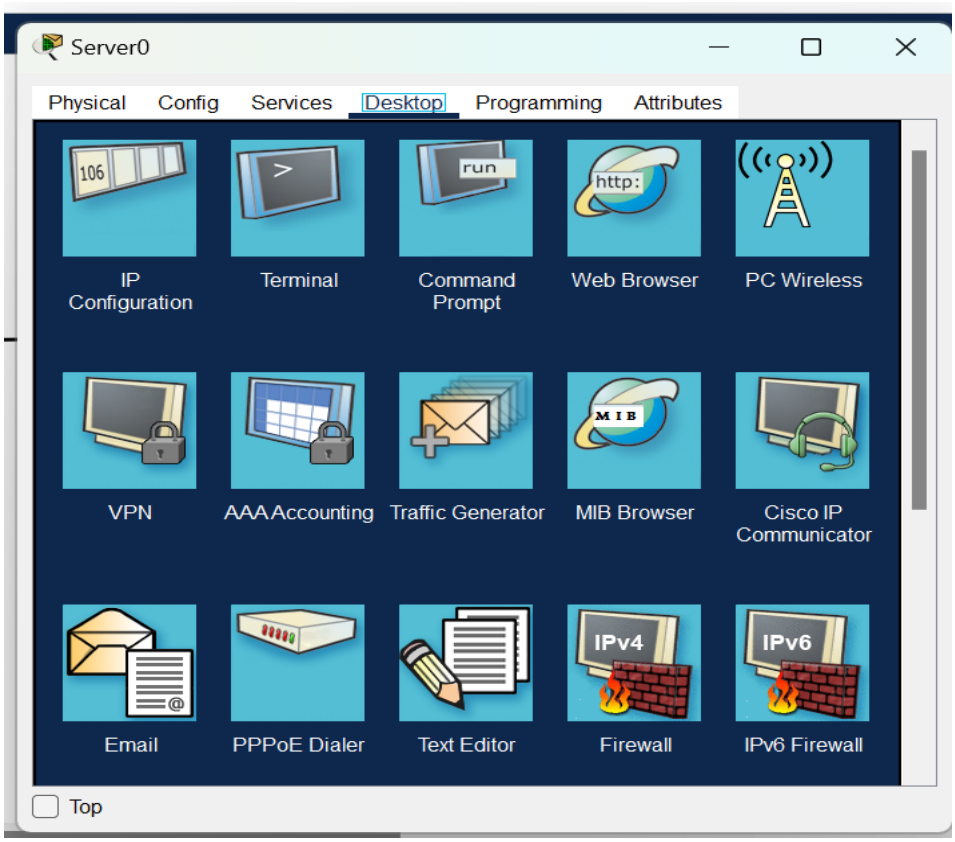


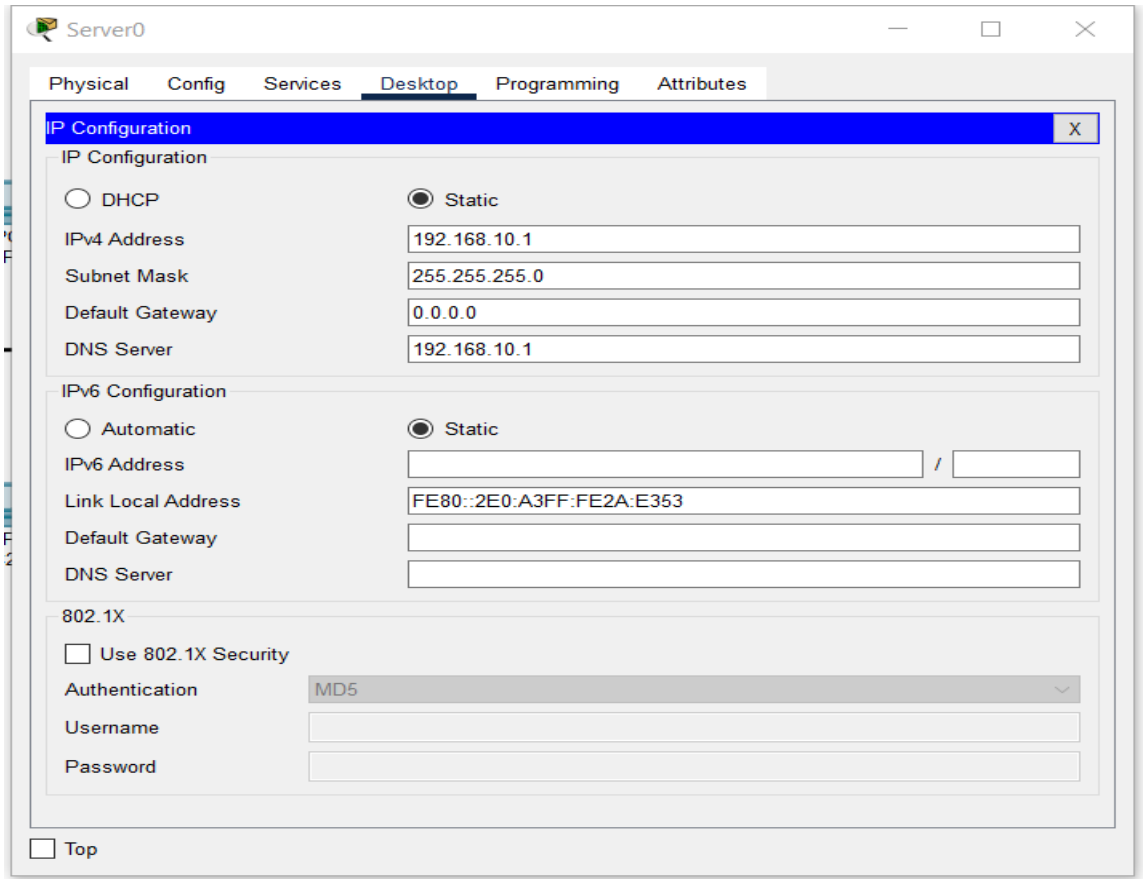
2)Connect them using copper straight wires.



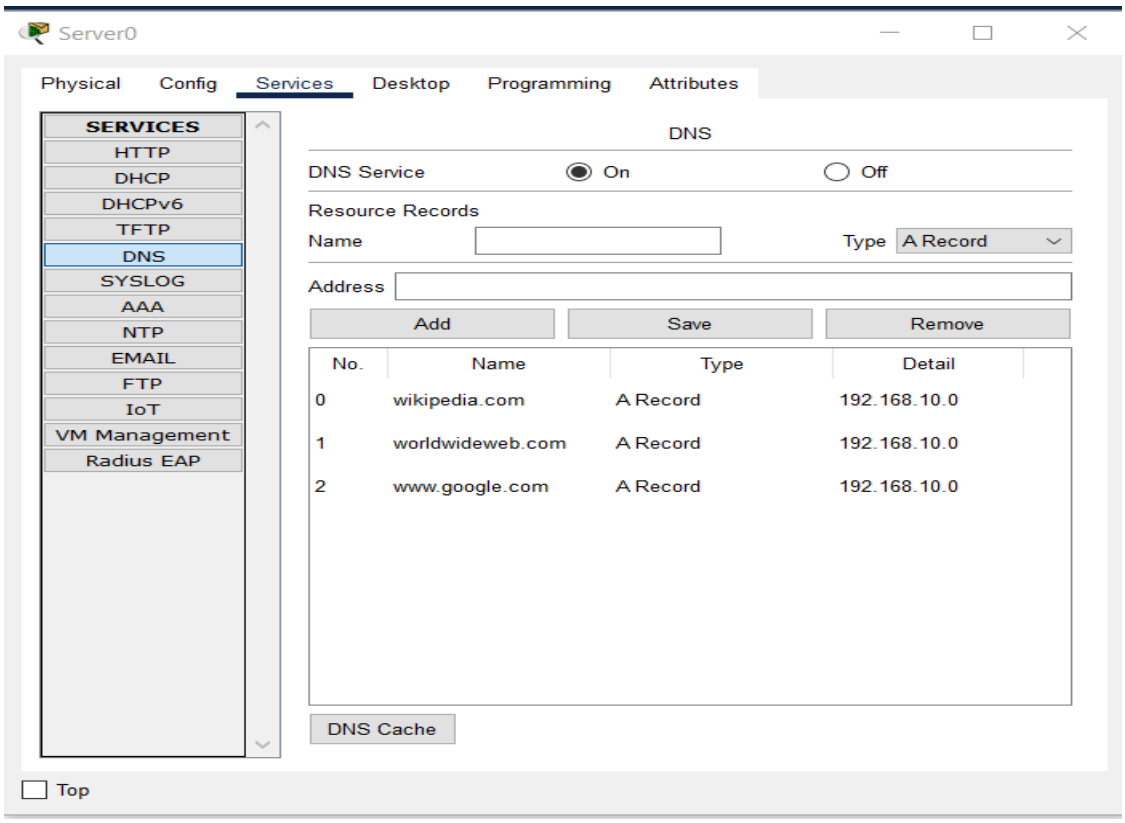
3)Configure the IP Address for the server.



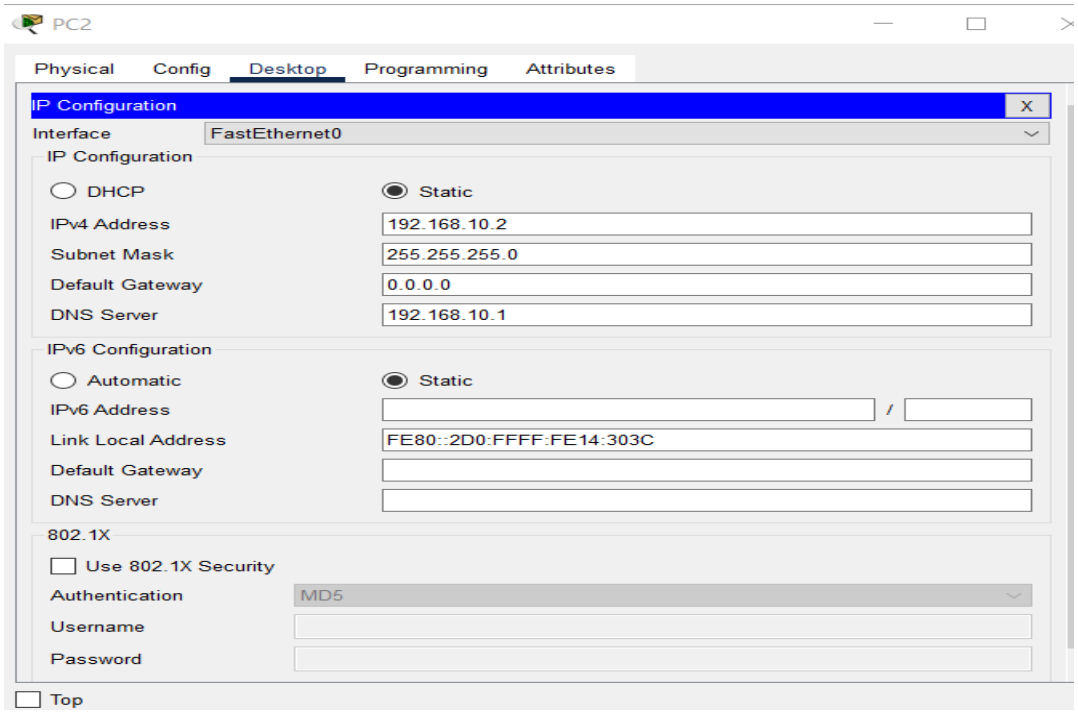

Server0
Physical
Config
Services
Desktop
Programming
Attributes
IP Configuration
Terminal
Command Prompt
Web Browser
PC Wireless
VPN
AAA Accounting
Traffic Generator
MIB Browser
Cisco IP Communicator
Email
PPPoE Dialer
Text Editor
Firewall
IPv6 Firewall
Top

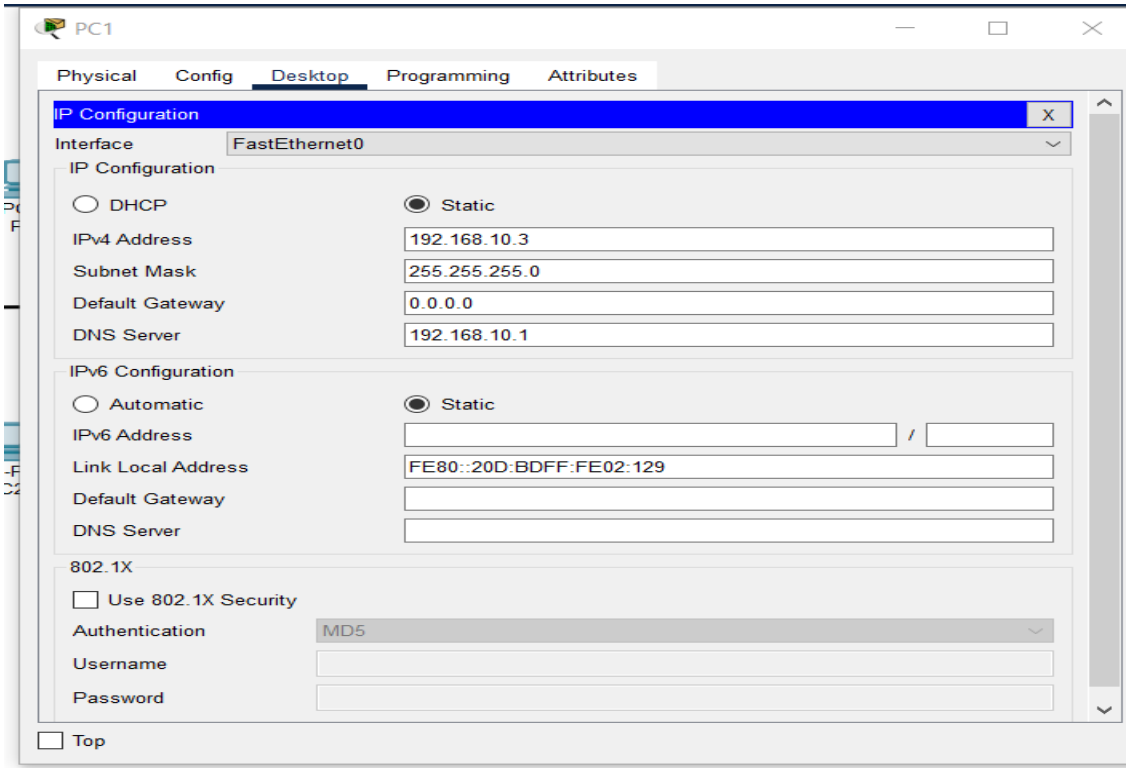

Server0
Physical
Config
Services
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IPv4 Address
192.168.10.1
Subnet Mask
255.255.255.0
Default Gateway
0.0.0.0
DNS Server
192.168.10.1
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::2E0:A3FF:FE2A:E353
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top

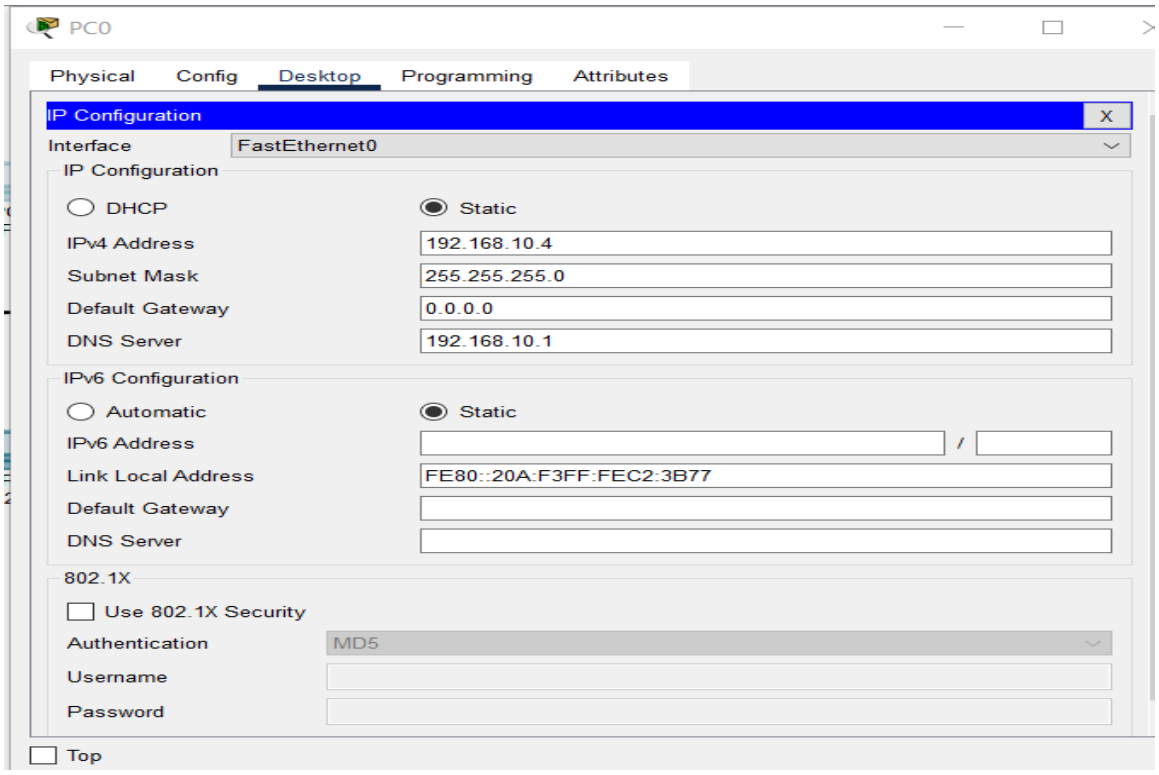
4)In the services→DNS, set DNS Service to ON and multiple websites using the same IP Address.



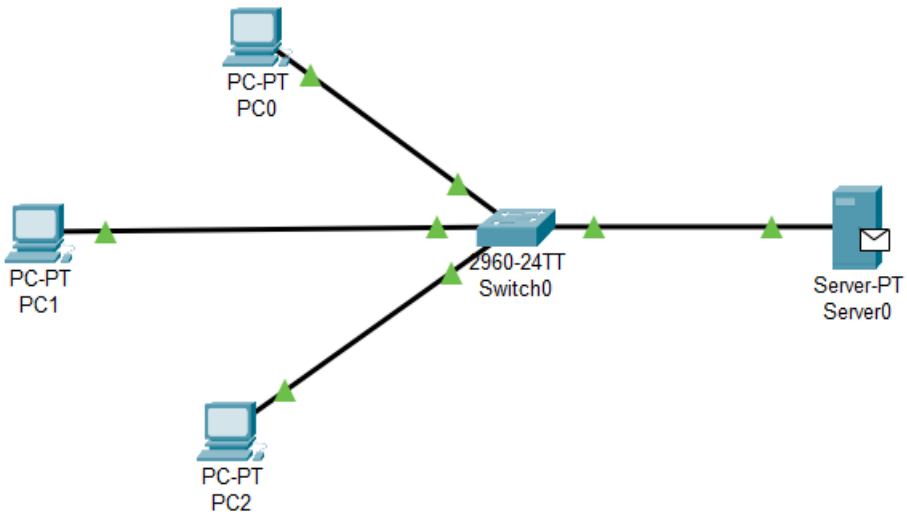
5)Configure all the 3 PC's with their own IP Address and the same DNS Address.



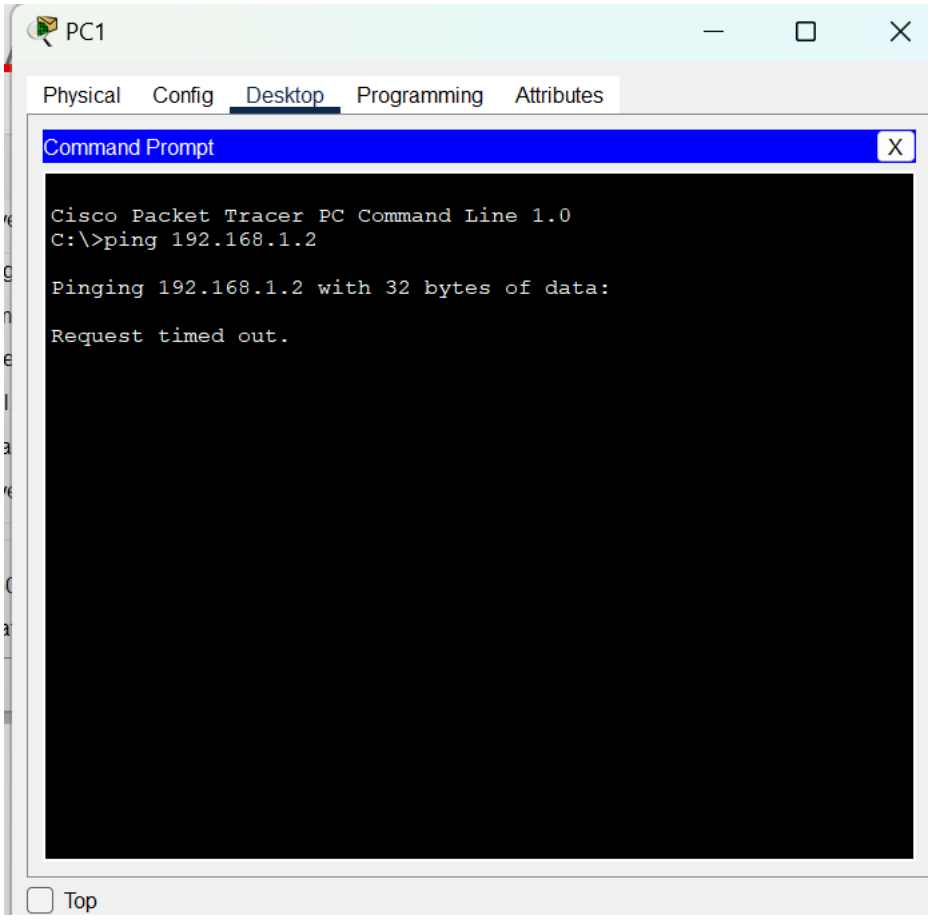




6)Add simple PDU from the server to each of the 3 PC’s.



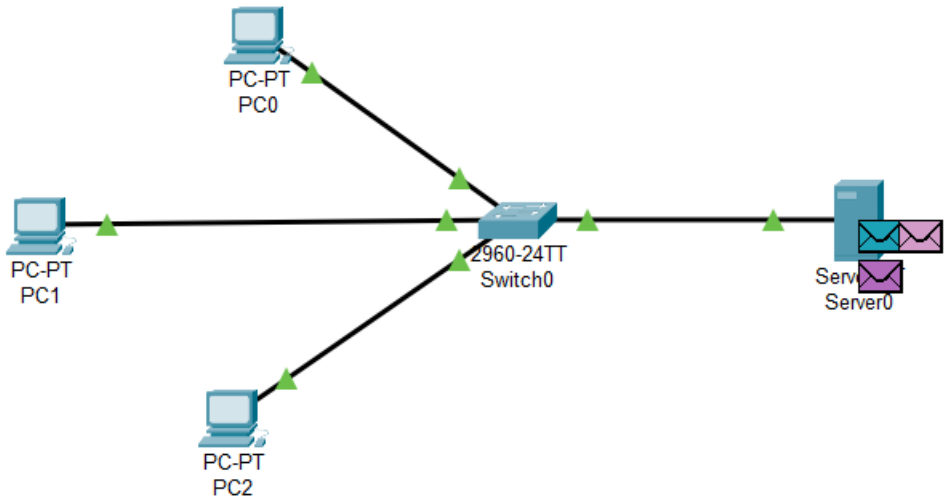
7) Use the Ping command.

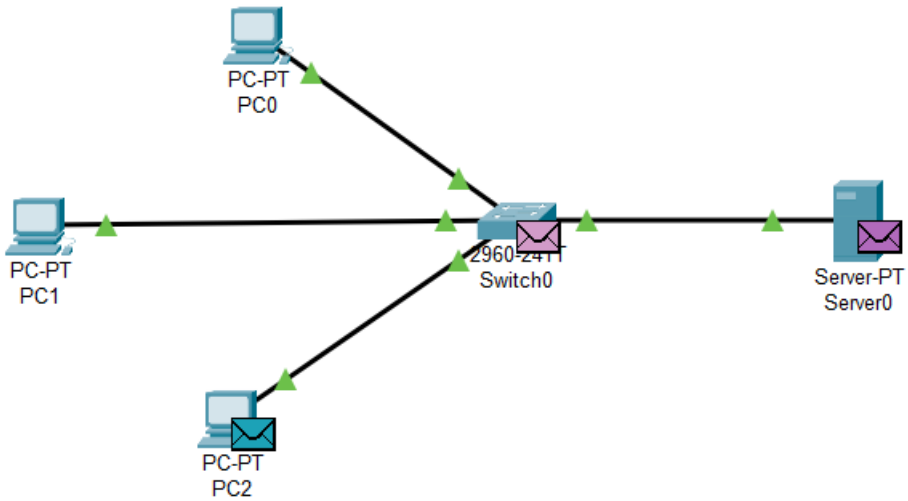


8) The simulation is successful.

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	Server0	PC2	ICMP		0.000	N	0	(edit)	(delete)
	Successful	Server0	PC1	ICMP		0.000	N	1	(edit)	(delete)
	Successful	Server0	PC0	ICMP		0.000	N	2	(edit)	(delete)

9)Run the simulation.

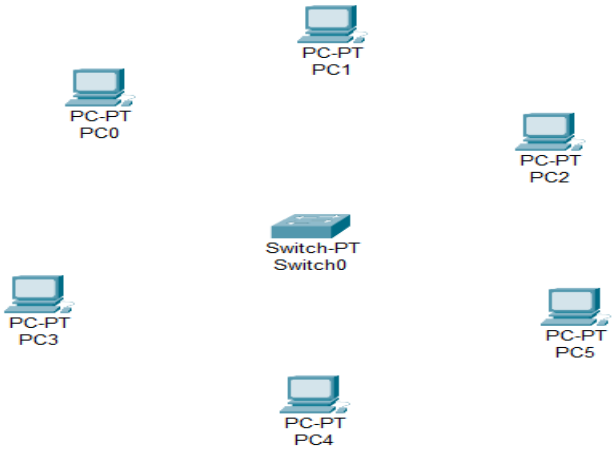


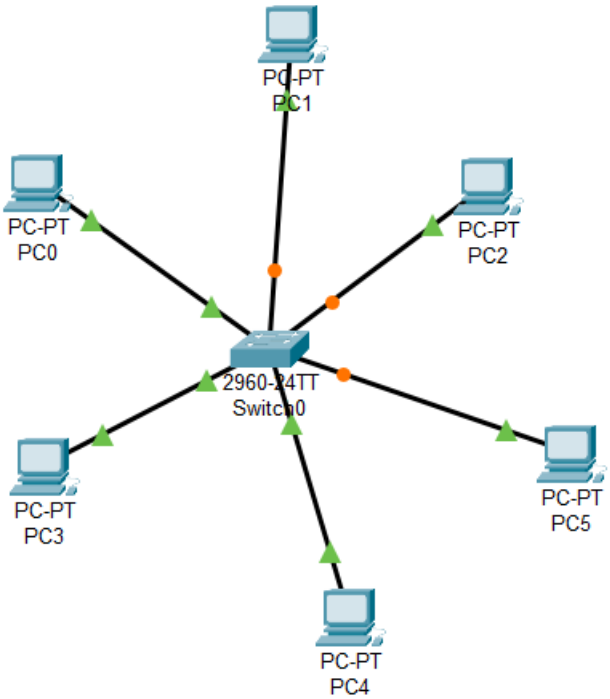


10)The DNS Server is setup with multiple websites using a single IP Address.

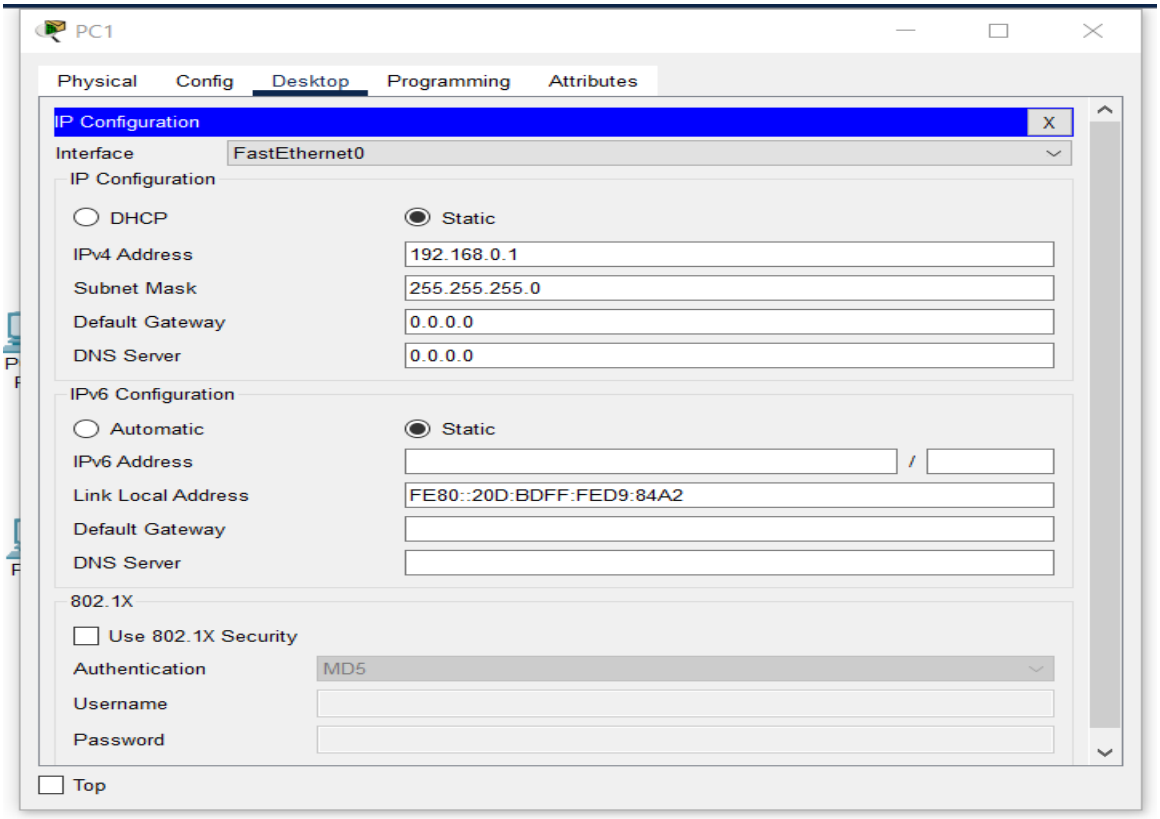
STAR TOPOLOGY CREATION-

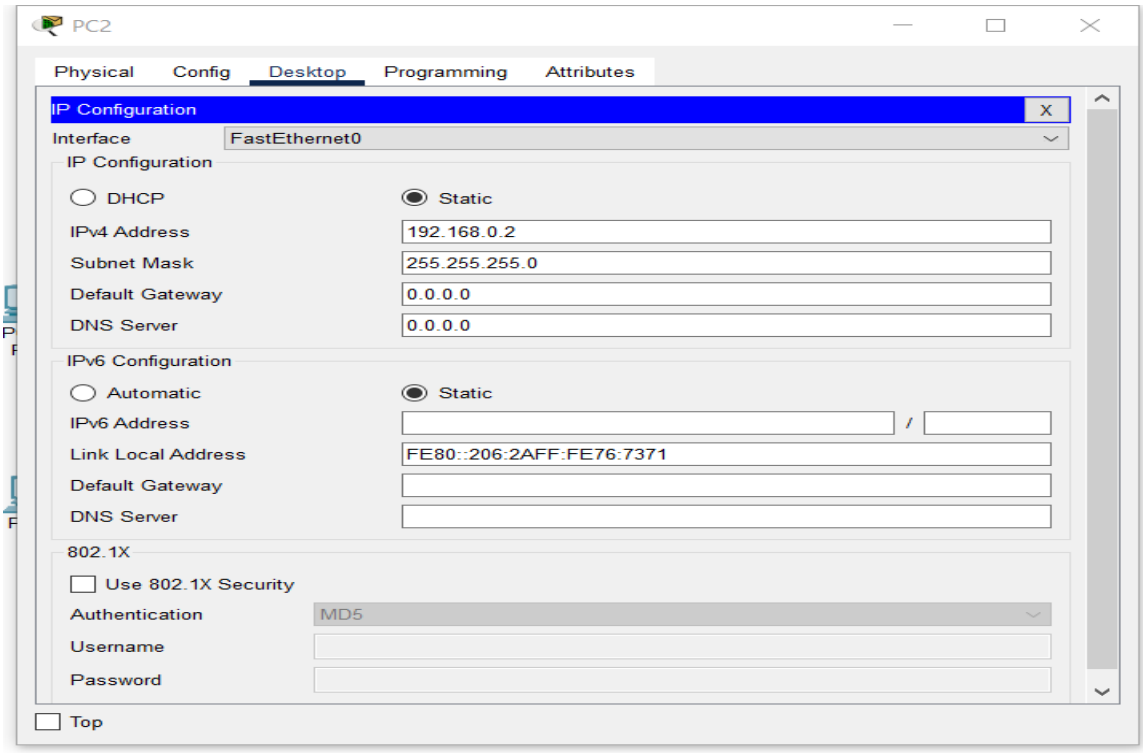
1)Take a switch and link it to six end devices.

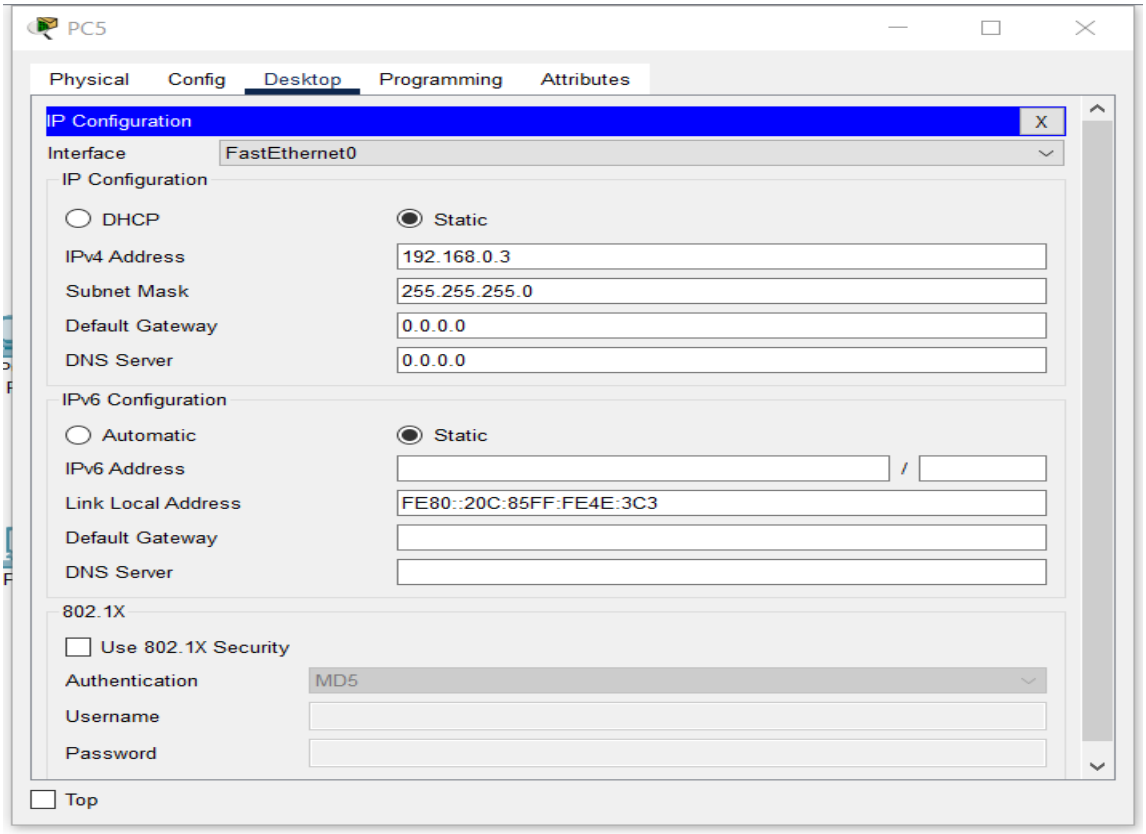


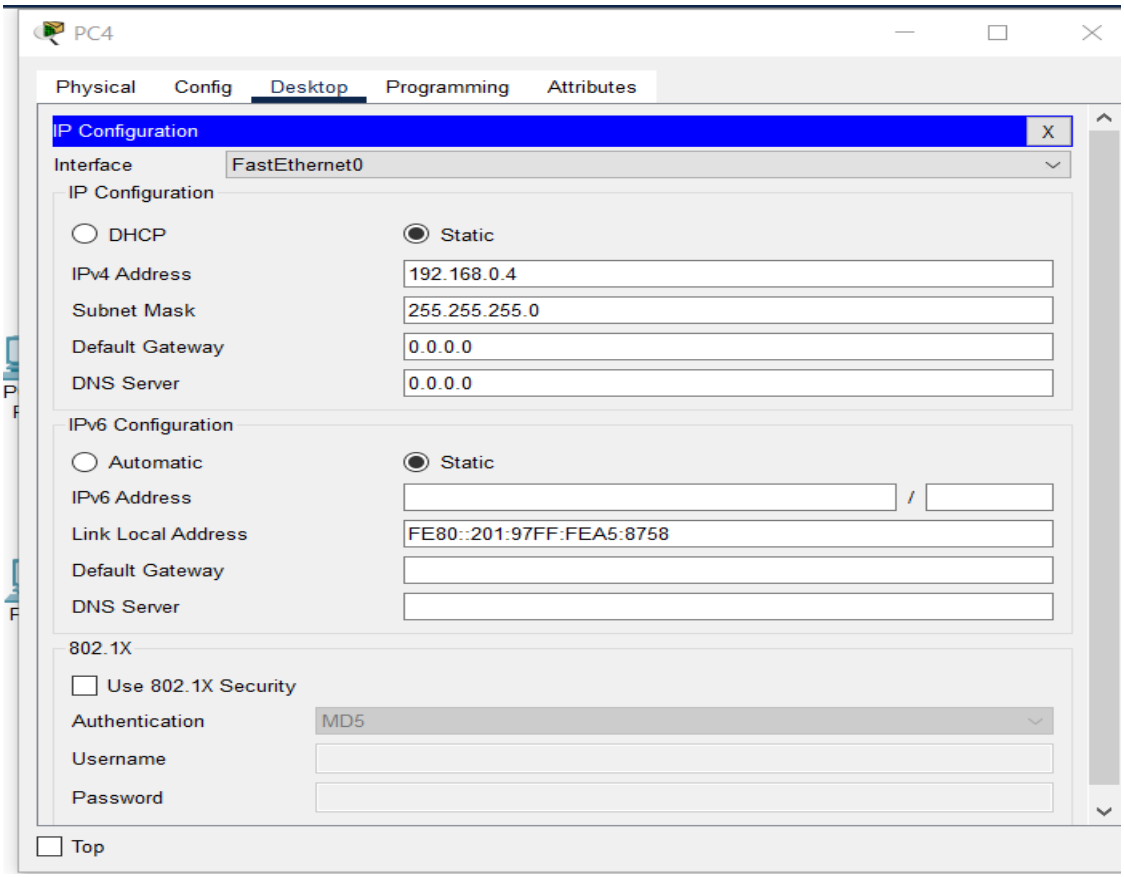


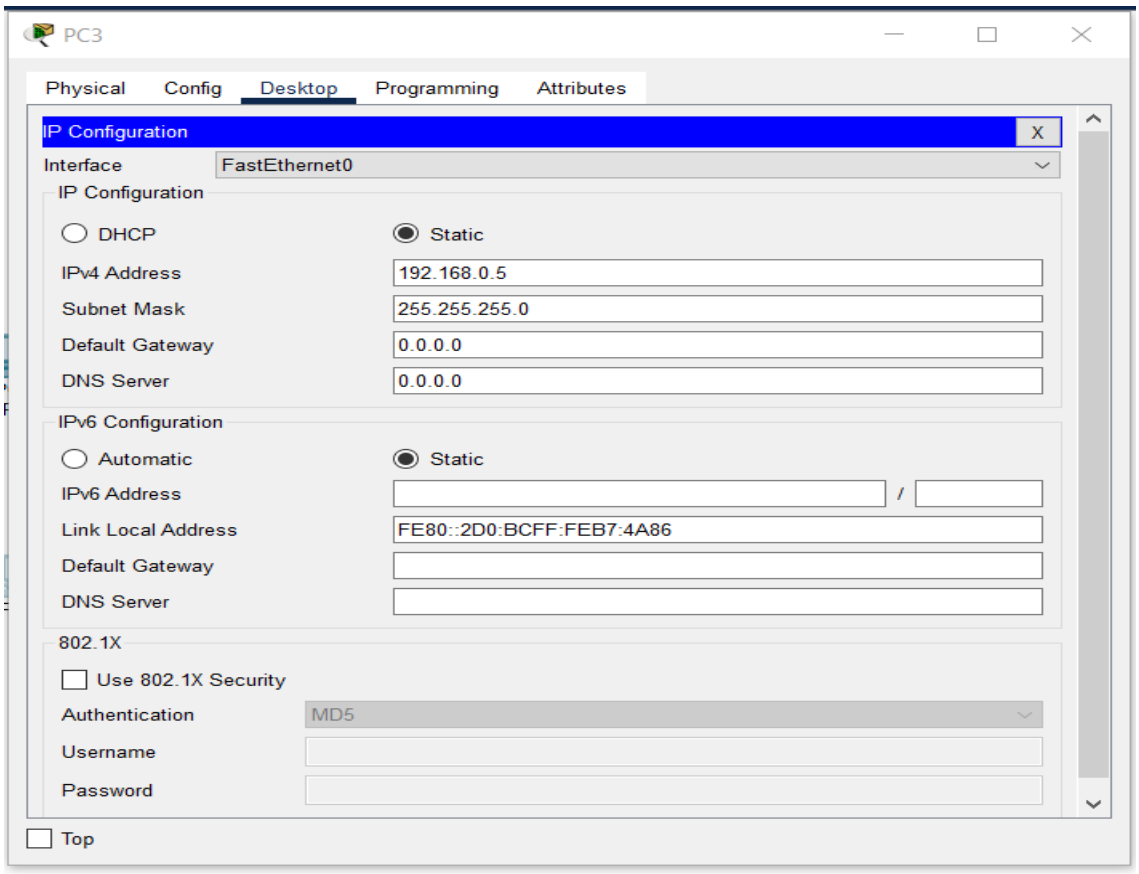
2)Provide IP Addresses for each of the PC's.

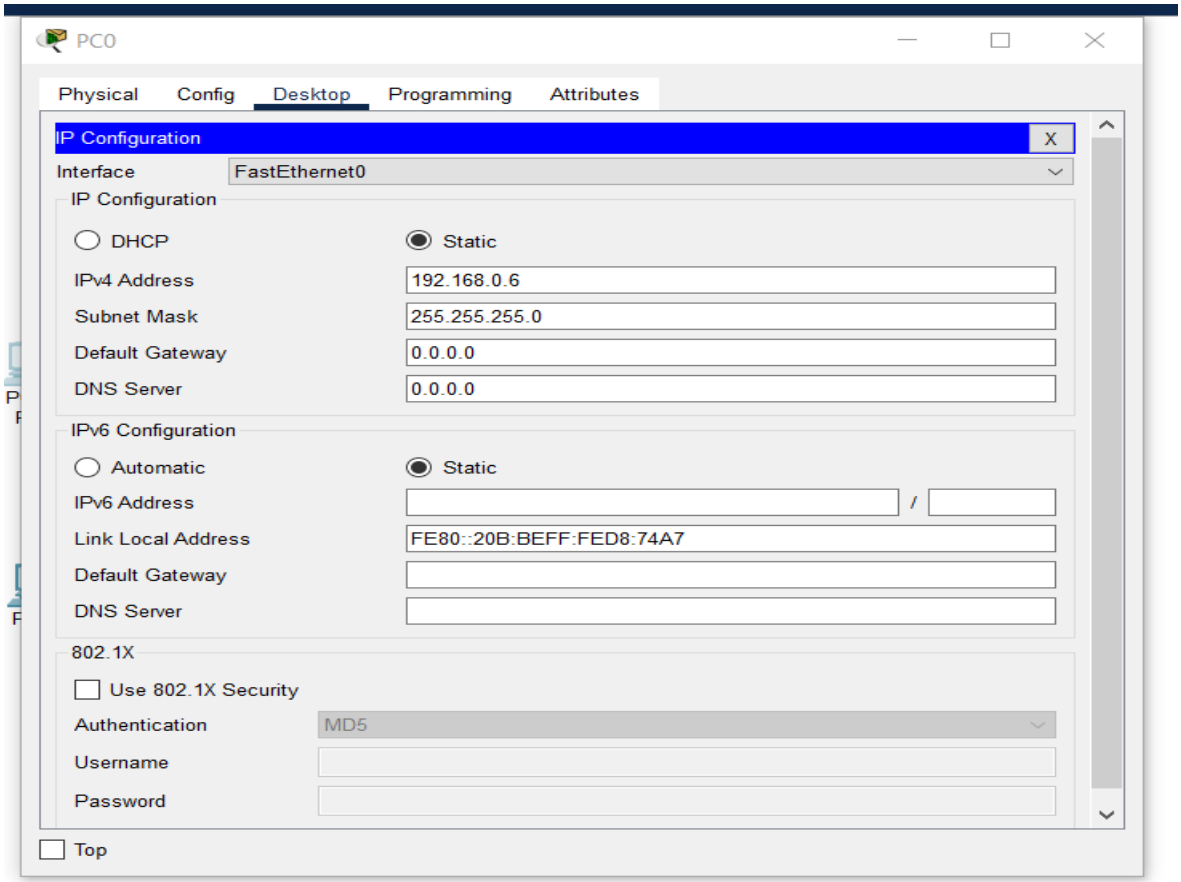




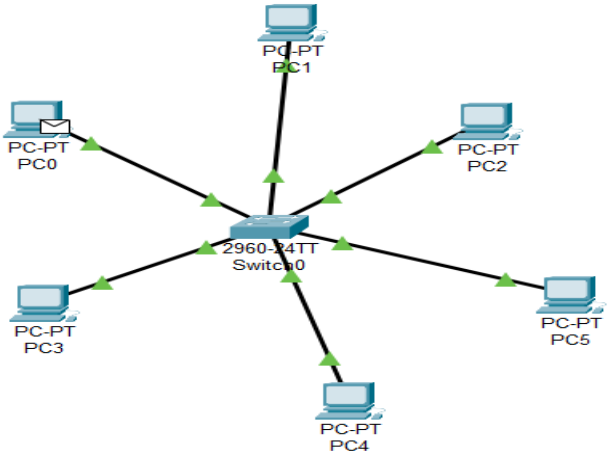

PC5
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
192.168.0.3
Subnet Mask
255.255.255.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
/
Link Local Address
FE80::20C:85FF:FE4E:3C3
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top

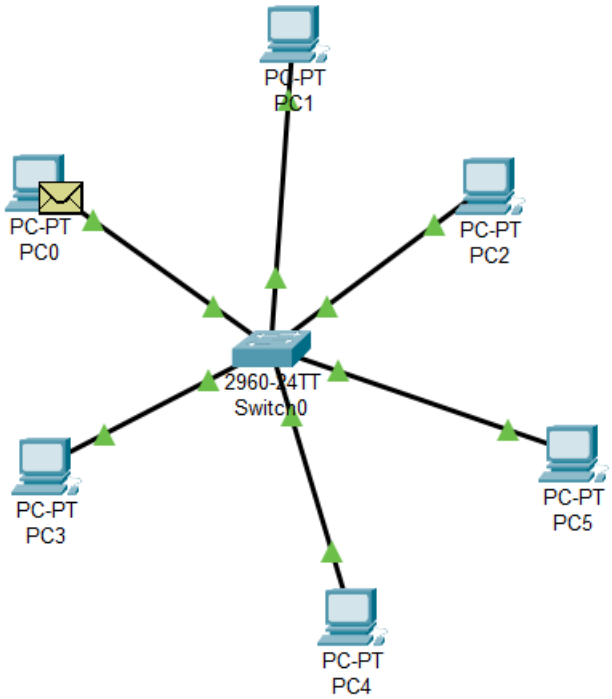

PC4
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
192.168.0.4
Subnet Mask
255.255.255.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
/
Link Local Address
FE80::201:97FF:FEA5:8758
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top


PC3
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
192.168.0.5
Subnet Mask
255.255.255.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
/
Link Local Address
FE80::2D0:BCFF:FEB7:4A86
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top

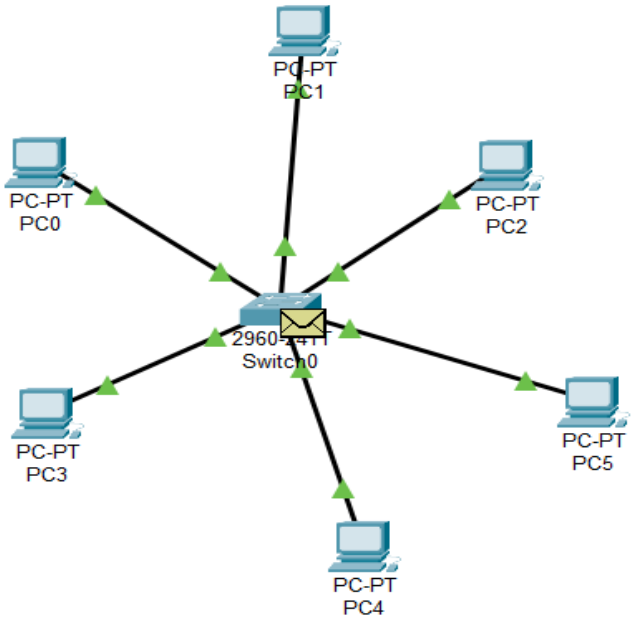

PC0
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
Interface
FastEthernet0
IP Configuration
DHCP
Static
IPv4 Address
192.168.0.6
Subnet Mask
255.255.255.0
Default Gateway
0.0.0.0
DNS Server
0.0.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
/
Link Local Address
FE80::20B:BEFF:FED8:74A7
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top

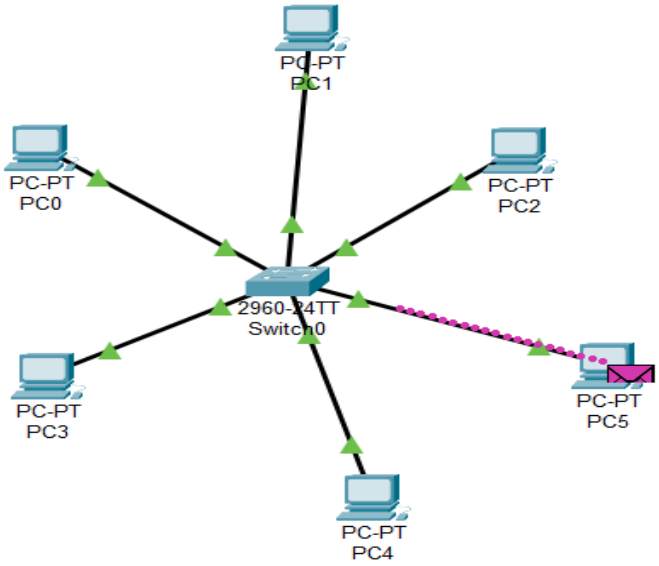
3)Transfer message from one PC to the other using simple PDU.



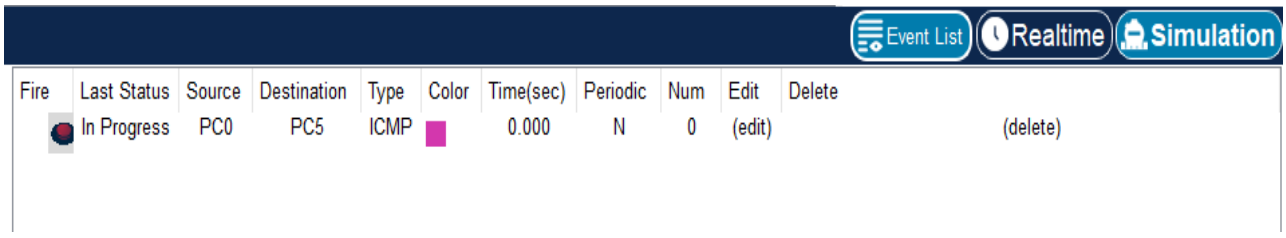


4)Turn on the simulation and check if it’s valid.





5)Check the simulation table list to find if it's valid and successful.



This way, the star topology is successfully created using Cisco Packet Tracer.

ANALYSIS ON DNS SERVER-

DNS stands for a **Domain Name System**.
DNS resolves names to numbers, to be more specific it resolves domain names to IP addresses. So if you type in a web address in your web browser, DNS will resolve the name to a number because the only thing computers know are numbers.

A Domain Name Service(DNS) server resolves host names into IP addresses. Although we can access a network host using its IP address, DNS makes it easier by allowing us use domain names which are easier to remember. For example its much easier to access google website by typing http://www.google.com as compared to typing http://208.117.229.214. In either case, you'll access google website, but using domain name is obviously easier.

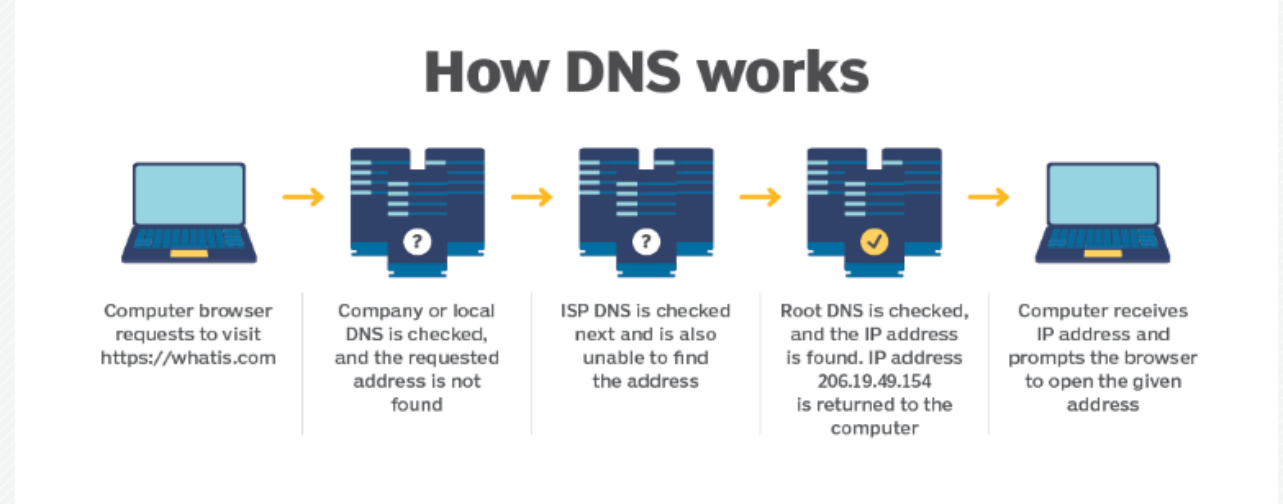
Now, before any host can use a DNS service, we must configure a DNS server first. For example, when you type the URL http://www.google.com in your browser, the host will query the DNS server for the IP address of http://www.google.com. The DNS server will resolve http://www.google.com into an IP address then answer back the host with the IP address.

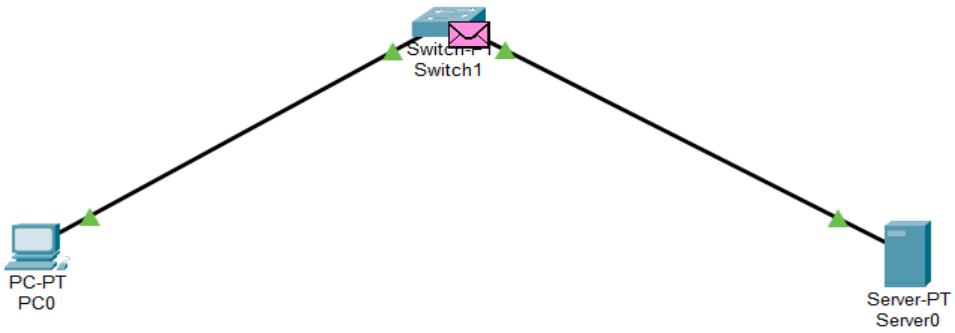
An HTTP server is a web server. It stores web resources that can be accessed by a web client. Your PC's browser(a web client) requests for web resources from a web server over the internet. Web resources are files such as text and images that the server will give to the client on request.

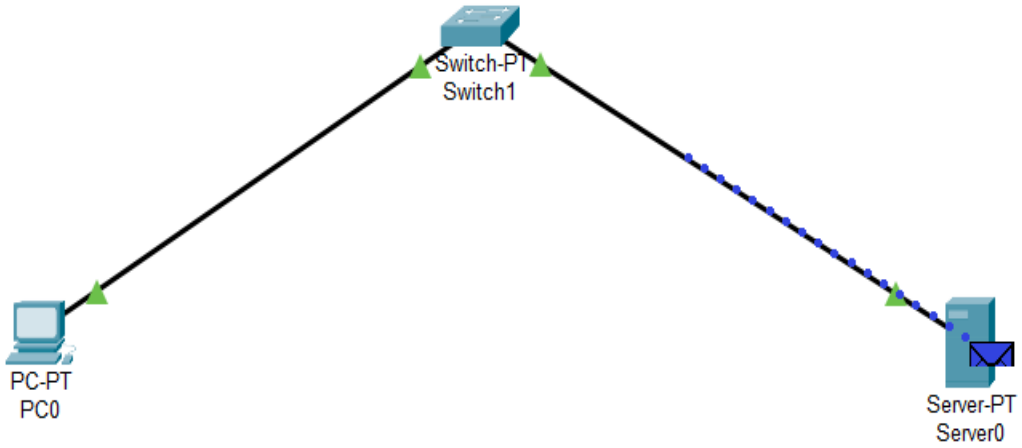
DNS servers convert URLs and domain names into IP addresses that computers can understand and use. They translate what a user types into a browser into something the machine can use to find a

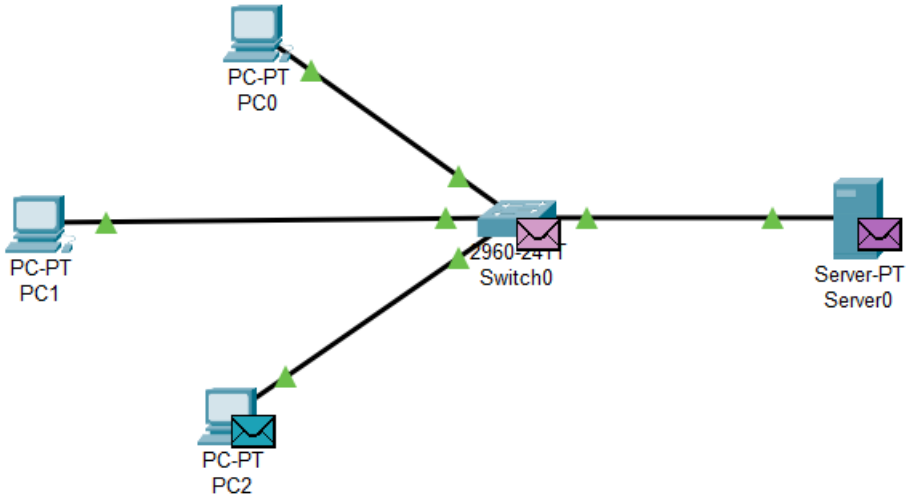
webpage. This process of translation and lookup is called *DNS resolution*.

The domain name system (DNS) is a naming database in which internet domain names are located and translated into Internet Protocol (IP) addresses. The domain name system maps the name people use to locate a website to the IP address that a computer uses to locate that website.






Switch-PT
Switch1
PC-PT
PC0
Server-PT
Server0


PC-PT
PC0
PC-PT
PC1
2960-24TT
Switch0
Server-PT
Server0
PC-PT
PC2

----------X----------

Thank you!