RAJALAKSHMI ENGINEERING COLLEGE

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DEPARTMENT OF COMPUTER SCIENCE AND DESIGN

CS23532- COMPUTER NETWORKS

(Regulation 2023)

LAB RECORD

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Semester	: IV
Academic Year	: 2024-25

Experiment -01

BASIC NETWORKING COMMANDS

AIM: - Study of various Network commands used in Linux and Windows

arp –a:- ARP is short form of address resolution protocol, It will show the IP address of your computer along with the IP address and MAC address of your router.
hostname: This is the simplest of all TCP/IP commands. It simply displays the name of your computer.
ipconfig /all: This command displays detailed configuration information about your TCP/IP connection including Router, Gateway, DNS, DHCP, and type of Ethernet adapter in your system
nbtstat –a: This command helps solve problems with NetBIOS name resolution. (Nbt stands for NetBIOS over TCP/IP)
netstat: (network statistics) netstat displays a variety of statistics about a computers active TCP/IP connections. It is a command line tool for monitoring network connections both incoming and outgoing as well as viewing routing tables, interface statistics etc. e.g.:- netstat -r
nslookup: (name server lookup) is a tool used to perform DNS lookups in Linux. It is used to display DNS details, such as the IP address of a particular computer, the MX records for a domain or the NS servers of a domain. nslookup can operate in two modes: interactive and non-interactive. e.g.:- nslookup www.google.com
pathping: Pathping is unique to Window's, and is basically a combination of the Ping and Tracert commands. Pathping traces the route to the destination address then launches a 25 second test of each router along the way, gathering statistics on the rate of data loss along each hop.
ping: (Packet INternet Groper) command is the best way to test connectivity between two nodes. Ping use ICMP (Internet Control Message Protocol) to communicate to other devices. 1. #ping hostname(ping localhost) 2. #ping ip address (ping 4.2.2.2) 3. #ping fully qualified domain name(ping www.facebook.com
Route: route command is used to show/manipulate the IP routing table. It is primarily used to setup static routes to specific host or networks via an interface.

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Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Lenovo> arp

Displays and modifies the IP-to-Physical address translation tables used by
address resolution protocol (ARP).

ARP -s inet_addr eth_addr [if_addr]
ARP -d inet_addr [if_addr]
ARP -a [inet_addr] [-N if_addr] [-v]

  -a            Displays current ARP entries by interrogating the current
                protocol data.  If inet_addr is specified, the IP and Physical
                addresses for only the specified computer are displayed.  If
                more than one network interface uses ARP, entries for each ARP
                table are displayed.
  -g            Same as -a.
  -v            Displays current ARP entries in verbose mode.  All invalid
                entries and entries on the loop-back interface will be shown.
  inet_addr     Specifies an internet address.
  -N if_addr    Displays the ARP entries for the network interface specified
                by if_addr.
  -d            Deletes the host specified by inet_addr. inet_addr may be
                wildcarded with * to delete all hosts.
  -s            Adds the host and associates the Internet address inet_addr
                with the Physical address eth_addr.  The Physical address is
                given as 6 hexadecimal bytes separated by hyphens. The entry
                is permanent.
  eth_addr      Specifies a physical address.
  if_addr       If present, this specifies the Internet address of the
                interface whose address translation table should be modified.
                If not present, the first applicable interface will be used.
Example:
  > arp -s 157.55.85.212   00-aa-00-62-c6-09  .... Adds a static entry.
  > arp -a                                    .... Displays the arp table.
PS C:\Users\Lenovo> hostname
DESKTOP-C01BH7D
PS C:\Users\Lenovo> ipconfig

Windows IP Configuration


Ethernet adapter Ethernet:

   Connection-specific DNS Suffix  . :
   Link-local IPv6 Address . . . . . : fe80::a098:b3f4:e84d:50c5%5
   IPv4 Address. . . . . . . . . . . : 172.16.75.153
   Subnet Mask . . . . . . . . . . . : 255.255.248.0
```

```
   Default Gateway . . . . . . . . . : 172.16.72.1
PS C:\Users\Lenovo> route

Manipulates network routing tables.

ROUTE [-f] [-p] [-4|-6] command [destination]
                  [MASK netmask]  [gateway] [METRIC metric]  [IF interface]

  -f           Clears the routing tables of all gateway entries.  If this is
               used in conjunction with one of the commands, the tables are
               cleared prior to running the command.

  -p           When used with the ADD command, makes a route persistent across
               boots of the system. By default, routes are not preserved
               when the system is restarted. Ignored for all other commands,
               which always affect the appropriate persistent routes.

  -4           Force using IPv4.

  -6           Force using IPv6.

  command      One of these:
                 PRINT     Prints  a route
                 ADD       Adds    a route
                 DELETE    Deletes a route
                 CHANGE    Modifies an existing route
  destination  Specifies the host.
  MASK         Specifies that the next parameter is the 'netmask' value.
  netmask      Specifies a subnet mask value for this route entry.
               If not specified, it defaults to 255.255.255.255.
  gateway      Specifies gateway.
  interface    the interface number for the specified route.
  METRIC       specifies the metric, ie. cost for the destination.

All symbolic names used for destination are looked up in the network database
file NETWORKS. The symbolic names for gateway are looked up in the host name
database file HOSTS.

If the command is PRINT or DELETE. Destination or gateway can be a wildcard,
(wildcard is specified as a star '*'), or the gateway argument may be omitted.

If Dest contains a * or ?, it is treated as a shell pattern, and only
matching destination routes are printed. The '*' matches any string,
and '?' matches any one char. Examples: 157.*.1, 157.*, 127.*, *224*.

Pattern match is only allowed in PRINT command.
Diagnostic Notes:
    Invalid MASK generates an error, that is when (DEST & MASK) != DEST.
    Example> route ADD 157.0.0.0 MASK 155.0.0.0 157.55.80.1 IF 1
             The route addition failed: The specified mask parameter is invalid. (Destination & Mask) != Destination.
```

```
Examples:

    > route PRINT
    > route PRINT -4
    > route PRINT -6
    > route PRINT 157*          .... Only prints those matching 157*

    > route ADD 157.0.0.0 MASK 255.0.0.0  157.55.80.1 METRIC 3 IF 2
              destination^      ^mask      ^gateway     metric^    ^
                                                        Interface^
      If IF is not given, it tries to find the best interface for a given
      gateway.
    > route ADD 3ffe::/32 3ffe::1

    > route CHANGE 157.0.0.0 MASK 255.0.0.0 157.55.80.5 METRIC 2 IF 2

      CHANGE is used to modify gateway and/or metric only.

    > route DELETE 157.0.0.0
    > route DELETE 3ffe::/32
PS C:\Users\Lenovo> ping

Usage: ping [-t] [-a] [-n count] [-l size] [-f] [-i TTL] [-v TOS]
            [-r count] [-s count] [[-j host-list] | [-k host-list]]
            [-w timeout] [-R] [-S srcaddr] [-c compartment] [-p]
            [-4] [-6] target_name

Options:
    -t             Ping the specified host until stopped.
                   To see statistics and continue - type Control-Break;
                   To stop - type Control-C.
    -a             Resolve addresses to hostnames.
    -n count       Number of echo requests to send.
    -l size        Send buffer size.
    -f             Set Don't Fragment flag in packet (IPv4-only).
    -i TTL         Time To Live.
    -v TOS         Type Of Service (IPv4-only. This setting has been deprecated
                   and has no effect on the type of service field in the IP
                   Header).
    -r count       Record route for count hops (IPv4-only).
    -s count       Timestamp for count hops (IPv4-only).
    -j host-list   Loose source route along host-list (IPv4-only).
    -k host-list   Strict source route along host-list (IPv4-only).
    -w timeout     Timeout in milliseconds to wait for each reply.
    -R             Use routing header to test reverse route also (IPv6-only).
                   Per RFC 5095 the use of this routing header has been
                   deprecated. Some systems may drop echo requests if
                   this header is used.
    -S srcaddr     Source address to use.
    -c compartment Routing compartment identifier.
    -p             Ping a Hyper-V Network Virtualization provider address.
```

```
    -4            Force using IPv4.
    -6            Force using IPv6.

PS C:\Users\Lenovo> nbtstat

Displays protocol statistics and current TCP/IP connections using NBT
(NetBIOS over TCP/IP).

NBTSTAT [ [-a RemoteName] [-A IP address] [-c] [-n]
        [-r] [-R] [-RR] [-s] [-S] [interval] ]

  -a   (adapter status) Lists the remote machine's name table given its name
  -A   (Adapter status) Lists the remote machine's name table given its
                        IP address.
  -c   (cache)          Lists NBT's cache of remote [machine] names and their IP addresses
  -n   (names)          Lists local NetBIOS names.
  -r   (resolved)       Lists names resolved by broadcast and via WINS
  -R   (Reload)         Purges and reloads the remote cache name table
  -S   (Sessions)       Lists sessions table with the destination IP addresses
  -s   (sessions)       Lists sessions table converting destination IP
                        addresses to computer NETBIOS names.
  -RR  (ReleaseRefresh) Sends Name Release packets to WINS and then, starts Refresh

  RemoteName   Remote host machine name.
  IP address   Dotted decimal representation of the IP address.
  interval     Redisplays selected statistics, pausing interval seconds
               between each display. Press Ctrl+C to stop redisplaying
               statistics.

PS C:\Users\Lenovo>  pathping

Usage: pathping [-g host-list] [-h maximum_hops] [-i address] [-n]
                [-p period] [-q num_queries] [-w timeout]
                [-4] [-6] target_name

Options:
    -g host-list     Loose source route along host-list.
    -h maximum_hops  Maximum number of hops to search for target.
    -i address       Use the specified source address.
    -n               Do not resolve addresses to hostnames.
    -p period        Wait period milliseconds between pings.
    -q num_queries   Number of queries per hop.
    -w timeout       Wait timeout milliseconds for each reply.
    -4               Force using IPv4.
    -6               Force using IPv6.
```

RESULT: the Study of various Network commands used in Linux and Windows has been studied successfully

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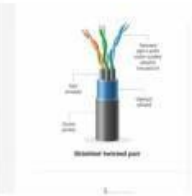
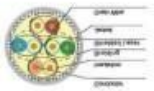
Experiment No 2

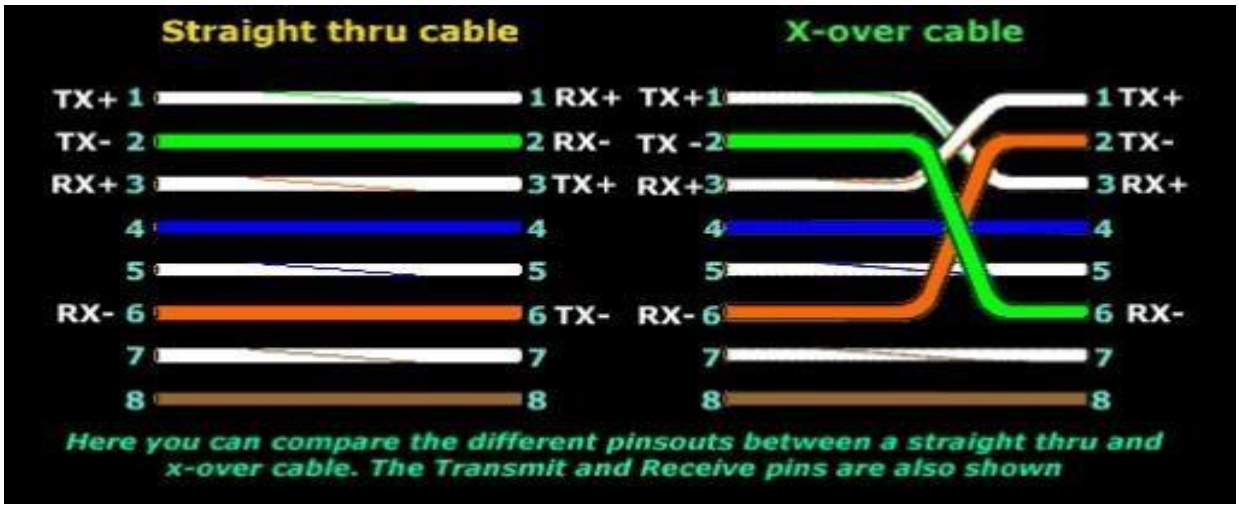
Aim: Study of different types of Network cables.

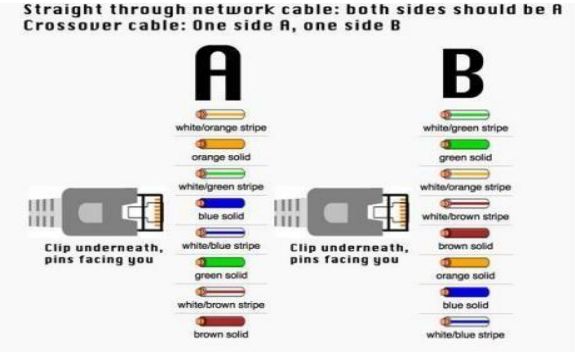
Different type of cables used in networking are:

1. **Unshielded Twisted Pair (UTP) Cable**
2. **Shielded Twisted Pair (STP) Cable**
3. **Coaxial Cable**
4. **Fiber Optic Cable**

Cable type	Category	Maximum Data Transmission	Advantages/ Disadvantages	Application/Use	Image
UTP	Category 3	10 bps	**Advantages** • Cheaper in cost • Easy to install as they have a smaller overall diameter. **Disadvantages** • More prone to (EMI) Electromagnetic interference and noise	10Base-T Ethernet	
	Category 5	Up to 100 Mbps		Fast Ethernet, Gigabit Ethernet	
	Category 5e	1Gbps		Fast Ethernet, Gigabit Ethernet	
STP	Category6,6a	10Gbps	**Advantages** • Shielded. • Faster than UTP. • Less susceptible to noise and interference **Disadvantages** • Expensive • Greater installation effort	Gigabit Ethernet, 10G Ethernet (55m) Widely used in data centres	
SSTP	Category 7	10Gbps		Gigabit Ethernet, 10G Ethernet (100m)	 

Coaxial cable	RG-6 RG-59 RG-11	10-100Mbps	• High bandwidth • Immune to interference • Low loss bandwidth • Versatile • **Disadvantages** • Limited distance • Cost • Size is bulky	Speed of signal is 500m Television network High speed internet connections	
fibre optics cable	Single mode Multi mode	100Gbps	**Advantages** • High speed • High bandwidth • High security • Long distance **Disadvantages** • Expensive • Requires skilled installers	• Maximum distance of fibre optics cable is around 100meters	





Step 1: To start construction of the device, begin by threading shields onto the cable. _crimping tool has a round area to complete this task.

Step 3: After, you will need to untangle the wires; there should be four "twisted pairs."

Referencing back to the sheet, arrange them from top to bottom. One end should be in arrangement A and the other in B.

Step 4: Once the order is correct, bunch them together in a line, and if there are any that

stick out farther than others, snip them back to create an even level. The difficult aspect

is placing these into the RJ45 plug without messing up the order. To do so, hold the plug

with the clip side facing away from you and have the gold pins facing toward you, as shown.

Step 5: Next, push the cable right in. The notch at the end of the plug needs to be just over the cable shielding, and if it isn't, that means that you stripped off too much shielding. Simply snip the cables back a little more.

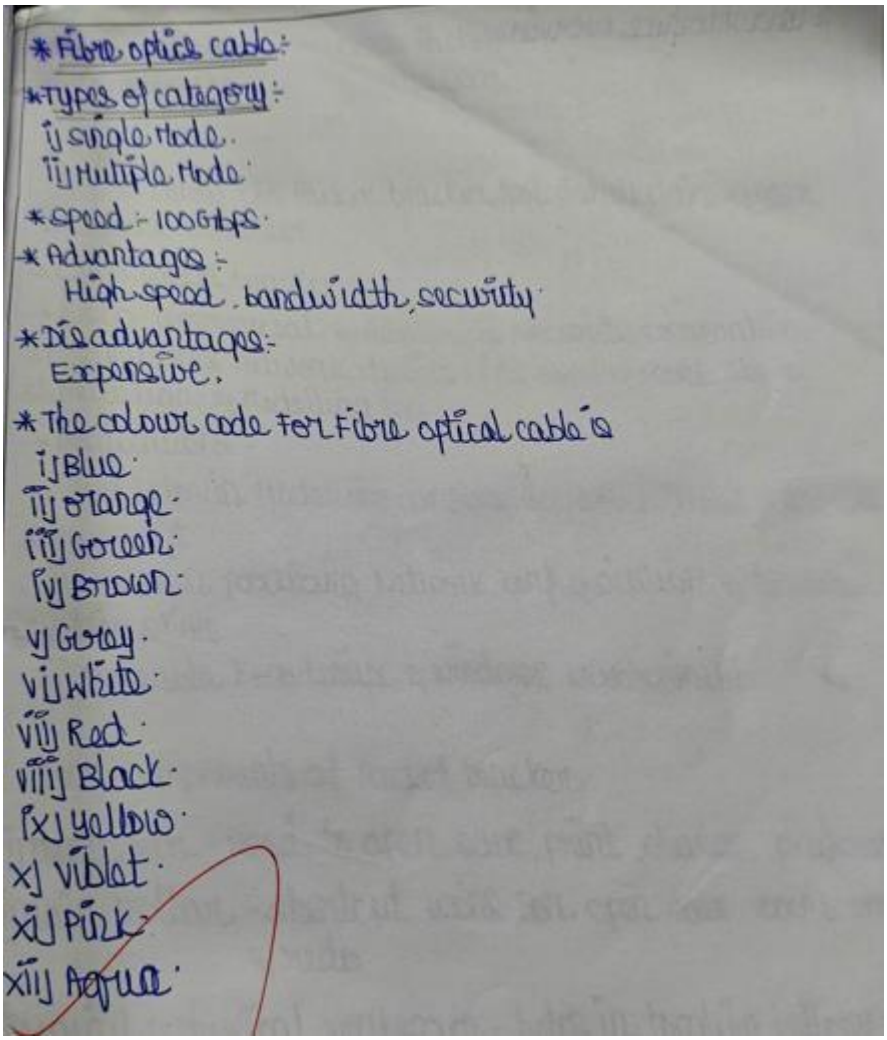
Step 6: After the wires are securely sitting inside the plug, insert it into the crimping tool

and push down. It should be shaped correctly, but pushing too hard can crack the fragile plastic plug.

Step 7: Lastly, repeat for the other end using diagram B (to make a crossover cables)/

using diagram A (to make a straight through cable)

To test it, plug it in and attempt to connect two devices directly.



Result :

The Study of different types of Network cables has been successfully executed.

Experiment -3

AIM: To study the Packet tracer tool Installation and User Interface

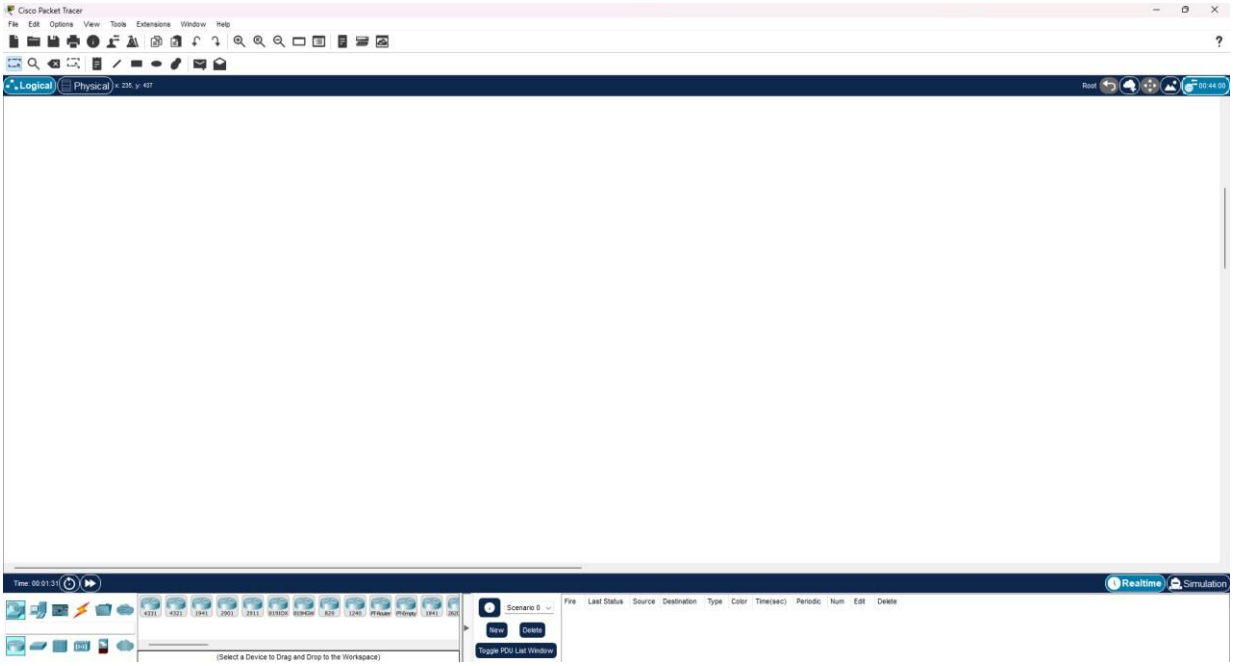
Overview

To understand environment of CISCO PACKET TRACER to design simple network.

It simulates network devices and its environment. Packet Tracer is an exciting

network design, simulation and modelling tool.

1. It allows you to model complex systems without the need for dedicated equipment.
2. It helps you to practice your network configuration and troubleshooting skills via computer or an Android or iOS based mobile device.
3. It is available for both the Linux and Windows desktop environments.
4. Protocols in Packet Tracer are coded to work and behave in the same way as they would on real hardware.



1. Menu bar - This is a common menu found in all software applications; it is used to open,save, print, change preferences, and so on.

2. Main toolbar - This bar provides shortcut icons to menu options that are commonly accessed, such as open, save, zoom, undo, and redo, and on the right-hand side is an icon for entering network information for the current network.

3. Logical/Physical workspace tabs - These tabs allow you to toggle between the Logical and Physical work areas.

4. Workspace - This is the area where topologies are created and simulations are displayed.

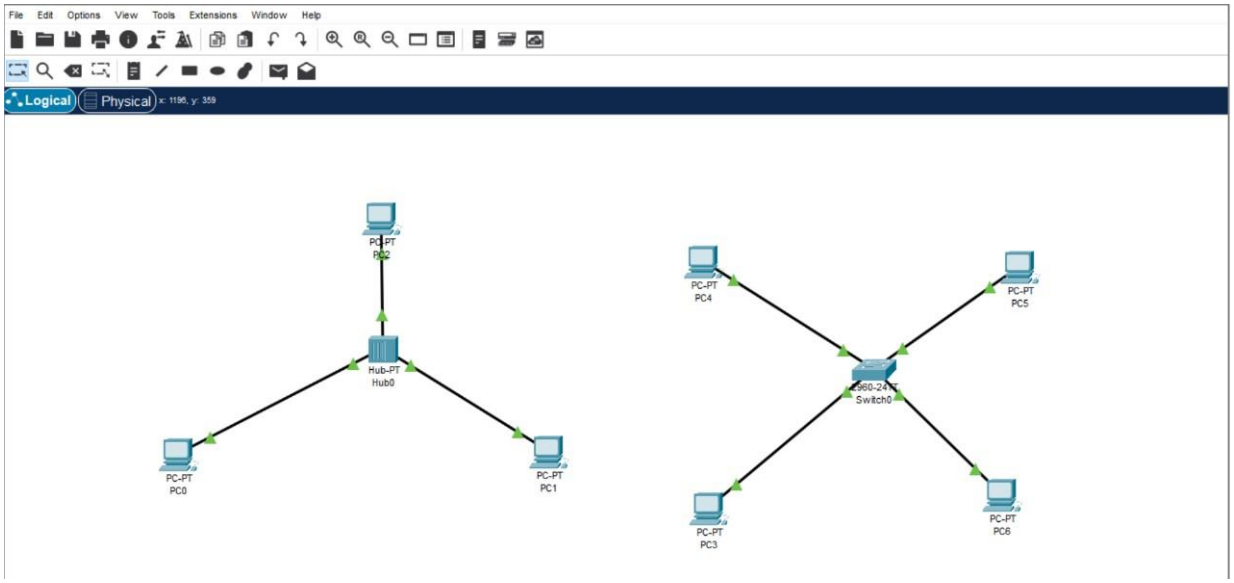
5. Common tools bar - This toolbar provides controls for manipulating topologies, such as select, move layout, place note, delete, inspect, resize shape, and add simple/complex PDU.

6. Real-time/Simulation tabs - These tabs are used to toggle between the real and simulation modes. Buttons are also provided to control the time, and to capture the packets.

Analyse the behaviour of network devices using CISCO PACKET TRACER simulator.

a. 4 Generic PCs and One HUB

b. 4 Generic PCs and One switch



Result:

The study the Packet tracer tool Installation and User Interface Overview has been executed successfully

Experiment 4

AIM: Setup and configure a LAN (Local area network) using a Switch and

Ethernet cables in your lab.

LAN:

A Local Area Network (LAN) refers to a network that connects devices within a limited area,such as an office building, school, or home. It enables users to share resources, including data,printers, and internet access. LAN connects devices to promote collaboration and transfer information between users, such as computers, printers, servers, and switches. A local area network (LAN) switch serves as the primary connecting device, managing and directing communications within the local network. Each connected device on a LAN switch can communicate directly with each other, allowing for fast and secure data transfer.

How to set up a LAN:

Step 1. Plan and Design an appropriate network topology taking into account network requirements and equipment location.

Step 2. You can take 4 Computers, a Switch with 8, 16, or 24 ports which is sufficient for networks of these sizes, and 4 Ethernet cables.

Step3: Connect your computers to network switch via an Ethernet cable, which is as simple as plugging one end of the Ethernet cable into your computer and the other end into your network switch.

Step4: Assign IP address to your PCs **Step 5**:-

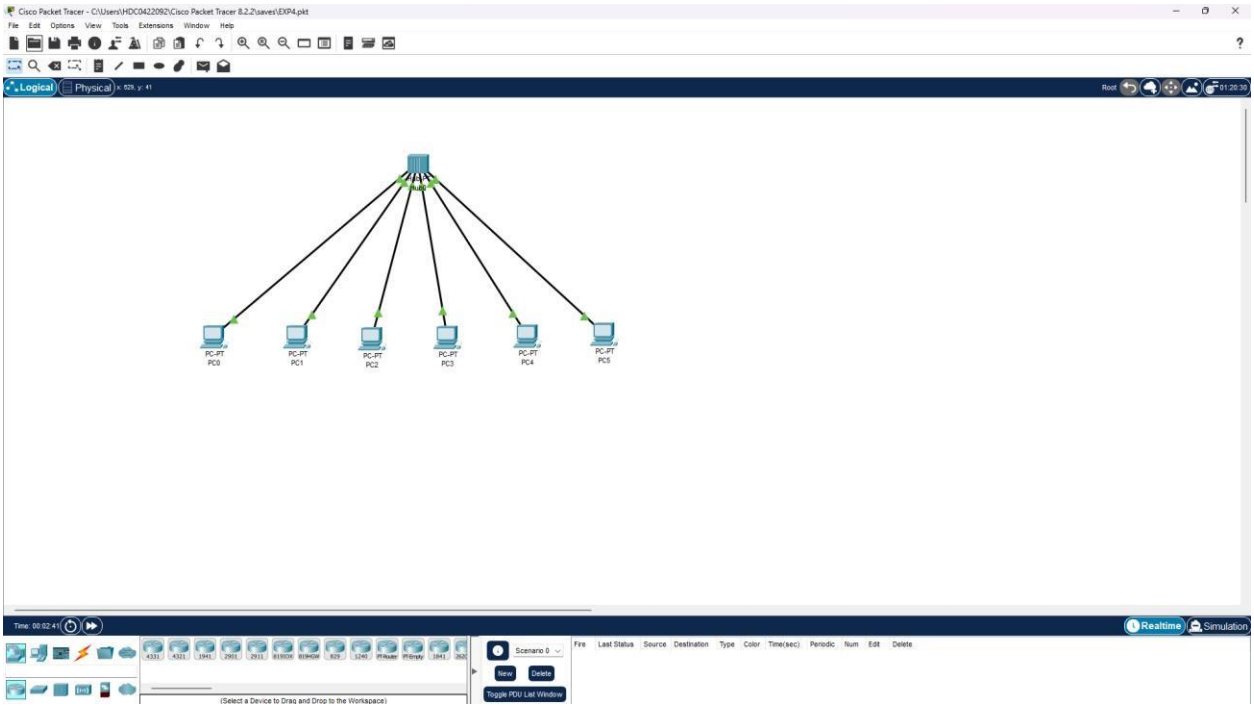
Configure a network switch:

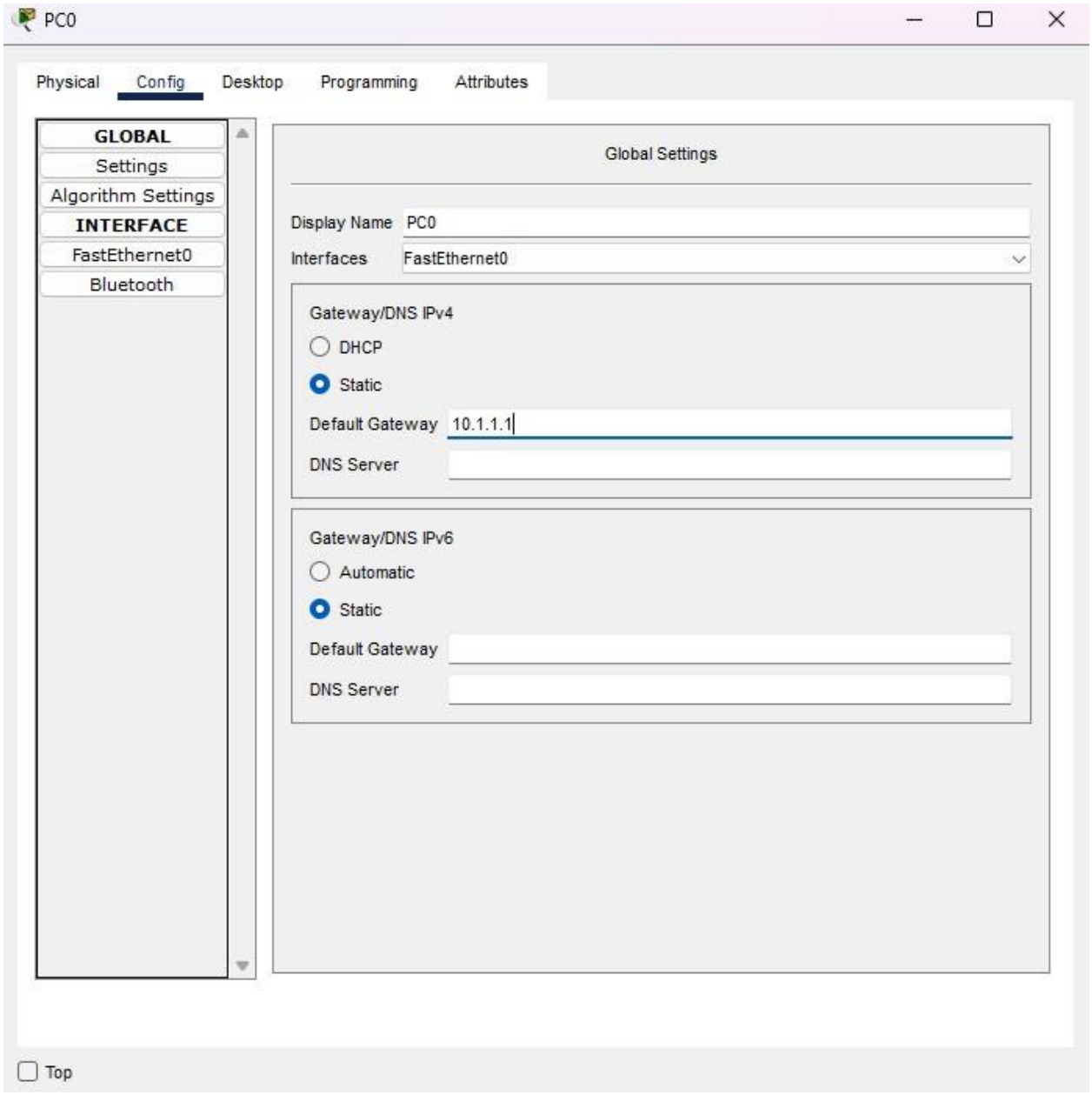
1. Connect your computer to the switch: To access the switch's web interface, you will need to connect your computer to the switch using an Ethernet cable.
2. Log in to the web interface: Open a web browser and enter the IP address of the switch in the address bar. This should bring up the login page for the switch's web interface.
3. Configure basic settings: Once you're logged in, you will be able to configure basic settings for the switch,
4. Assign IP address as: 10.1.1.5, subnet mask 255.0.0.0.

Step 6:- Check the connectivity between switch and other machine by using ping command in the command prompt of the device.

Step 7: Select a folder, ->go to properties-> click Sharing tab->share it with everyone on the same LAN.

Step 8. Try to access the shared folder from others Computers of the network.





RESULT:

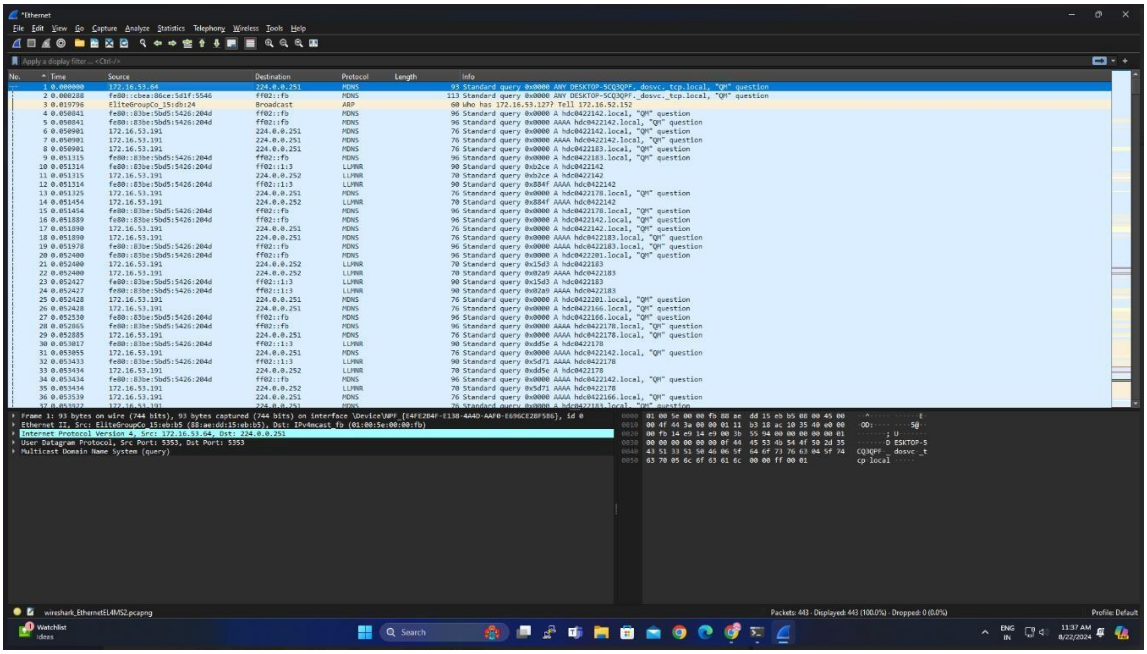
The Setup and configure a LAN (Local area network) using a Switch and Ethernet cables is executed successfully

EXPERIMENT – 5

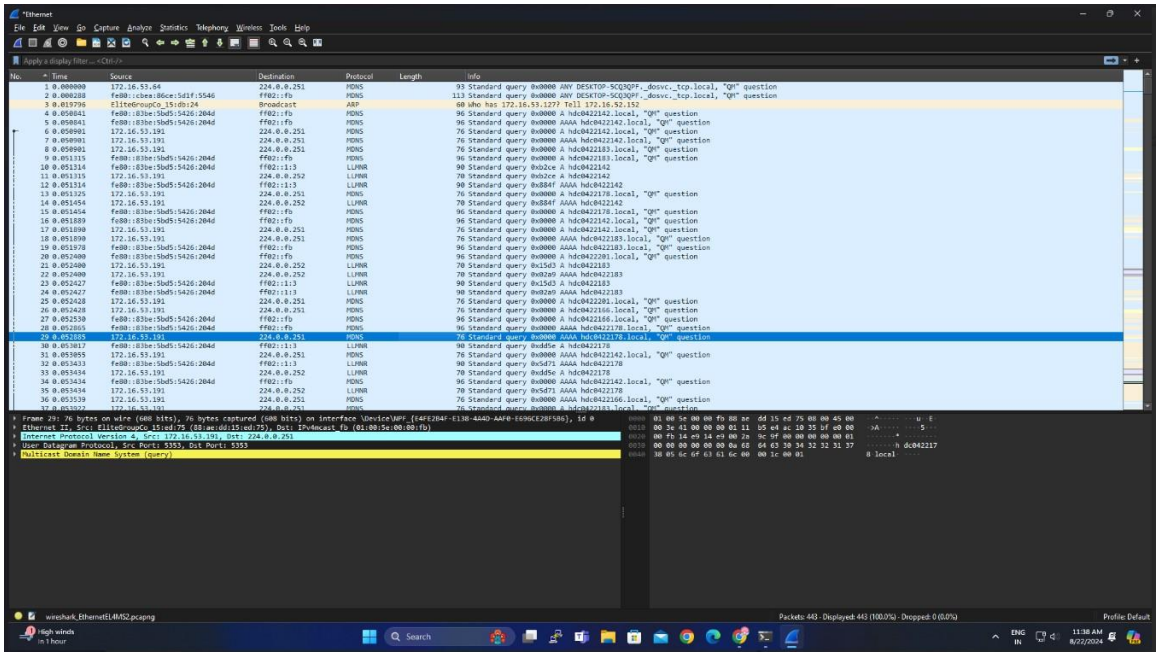
AIM: - Experiments on Packet capture tool: Wireshark

CAPTURING AND ANALYSING PACKETS USING WIRESHARK TOOL:

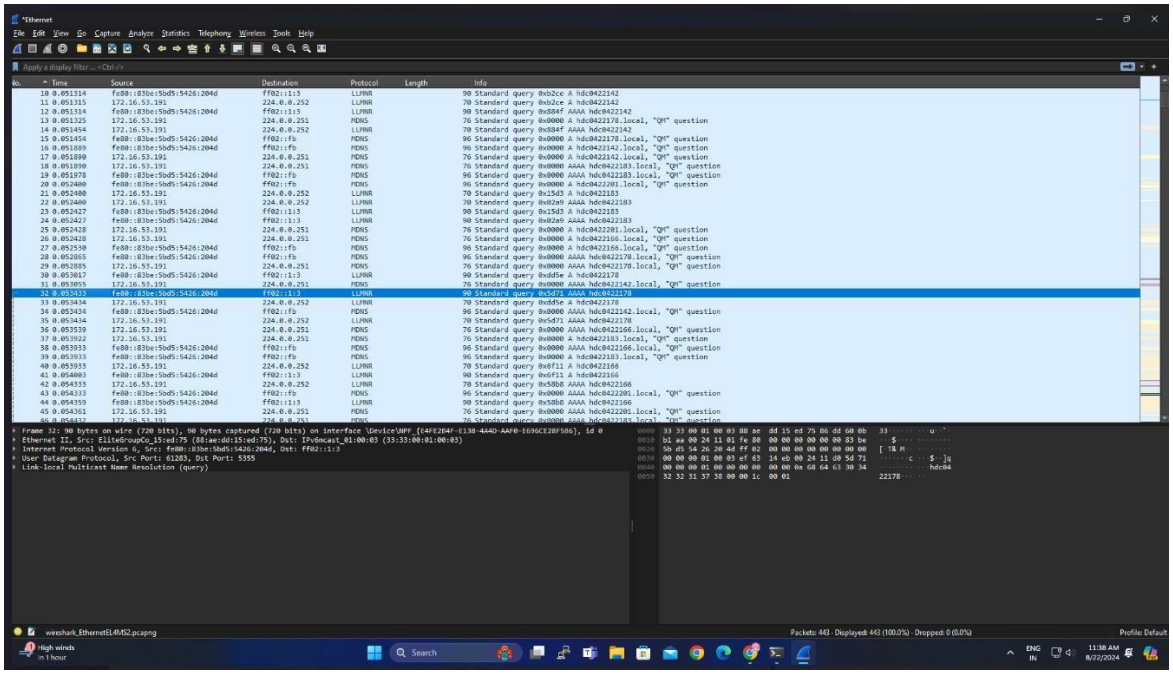
Packet 1:



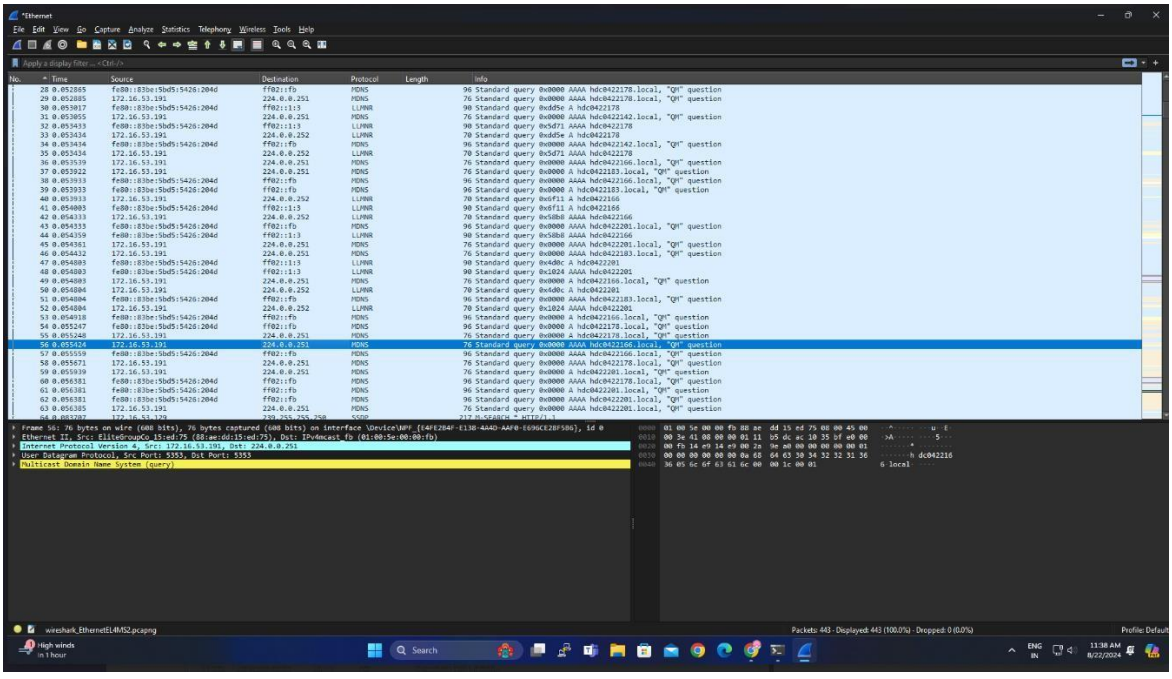
Packet 2:



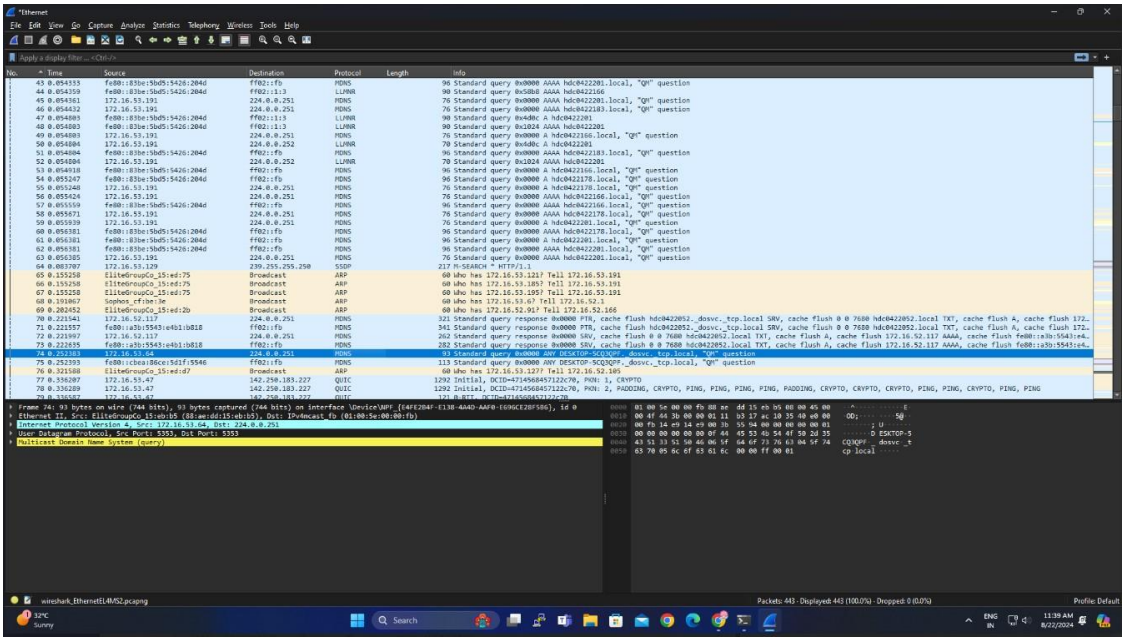
Packet 3:



Packet 4:



Packet 5:

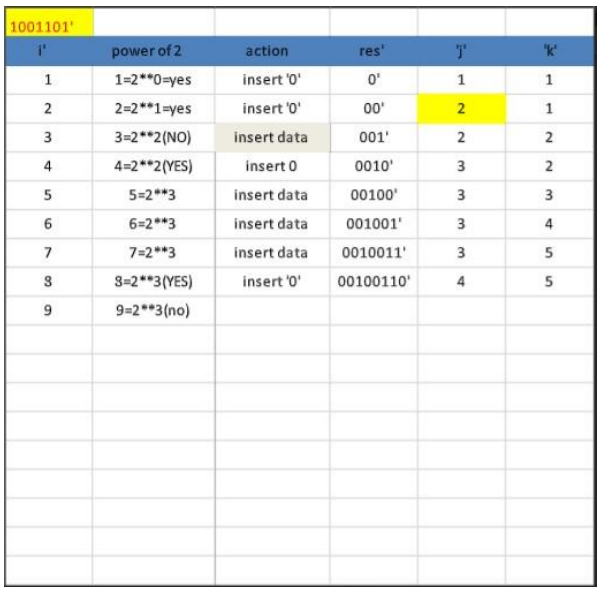


RESULT: -

Capturing and analysing the packets have been done successfully using Wireshark.

EXPERIMENT – 6

AIM: - Write a program to implement error detection and correction using HAMMING code concept. Make a test run to input data stream and verify error correction feature.



1001101'					
i'	power of 2	action	res'	'j'	'k'
1	1=2**0=yes	insert '0'	0'	1	1
2	2=2**1=yes	insert '0'	00'	2	1
3	3=2**2(NO)	insert data	001'	2	2
4	4=2**2(YES)	insert 0	0010'	3	2
5	5=2**3	insert data	00100'	3	3
6	6=2**3	insert data	001001'	3	4
7	7=2**3	insert data	0010011'	3	5
8	8=2**3(YES)	insert '0'	00100110'	4	5
9	9=2**3(no)				

CODE: - def

```
calcRedundantBits(m):
    # Use the formula 2 ^ r >= m + r + 1
for i in range(m):         if(2**i >= m
+ i + 1):
            return i
 def posRedundantBits(data,
r):
    # Redundancy bits are placed at the positions
j = 0     k = 1     m = len(data)     res = ''
    # If position is power of 2 then insert '0' Else append the data
for i in range(1, m+r+1):         if(i == 2**j):
            res = res + '0'
j += 1         else:
            res = res + data[-1 * k]
k += 1
    # The result is reversed since positions are counted backwards. (m + r+1
... 1)
    return res[::-1]
  def calcParityBits(arr,
r):
    n = len(arr)
    # For finding rth parity bit, iterate over
    # 0 to r - 1
for i in range(r):
        val = 0         for j in
range(1, n + 1):

            # If position has 1 in ith significant
            # position then Bitwise OR the array value
            # to find parity bit value.
if(j & (2**i) == (2**i)):
                val = val ^ int(arr[-1 * j])
                # -1 * j is given since array is reversed

        # String Concatenation
```

```
        # (0 to n - 2^r) + parity bit + (n - 2^r + 1 to n)
arr  =  arr[:n-(2**i)]  +  str(val)  +  arr[n-(2**i)+1:]
return arr
 def detectError(arr,
nr):
    n = len(arr)
res = 0

    # Calculate parity bits again
for i in range(nr):
        val = 0         for j in
range(1, n + 1):             if(j &
(2**i) == (2**i)):
                val = val ^ int(arr[-1 * j])

        # Create a binary no by appending
        # parity bits together.

        res = res + val*(10**i)
    # Convert binary to decimal
return int(str(res), 2)


# Enter the data to be transmitted data
= '1011001'

# Calculate the no of Redundant Bits Required
m = len(data) r = calcRedundantBits(m)

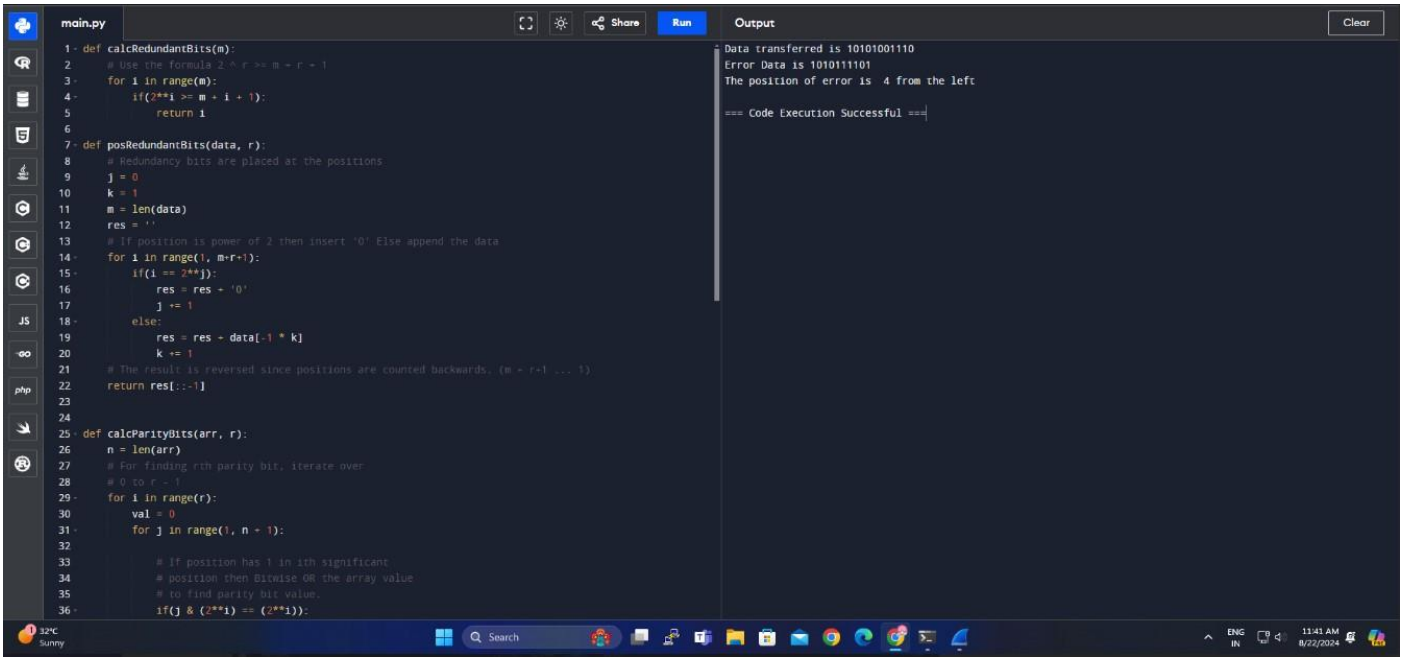
# Determine the positions of Redundant Bits arr
= posRedundantBits(data, r)

# Determine the parity bits arr
= calcParityBits(arr, r) # Data
to be transferred
print("Data transferred is " + arr)

# Stimulate error in transmission by changing
# a bit value.
# 10101001110 -> 11101001110, error in 10th position.

arr = '10101001110' print("Error
Data is " + arr) correction =
detectError(arr, r)
if(correction==0):
    print("There is no error in the received message.") else:
    print("The position of error is ",len(arr)-correction+1,"from the left")
```

OUTPUT: -



RESULT: -

The code for HAMMING CODE have been executed successfully and the output is verified.

EXPERIMENT – 7

AIM: - Write a program to implement flow control at data link layer using SLIDING WINDOW PROTOCOL. Simulate the flow of frames from one node to another.

CODE: -

```
# include <stdio.h> int
main()
{
      int w,i,f,frames[50];
printf("Enter window size");
scanf("%d", &w);
      printf("\n Enter %d frames:", f);
scanf("%d", &f);
       printf("\n Enter %d frames:", f);

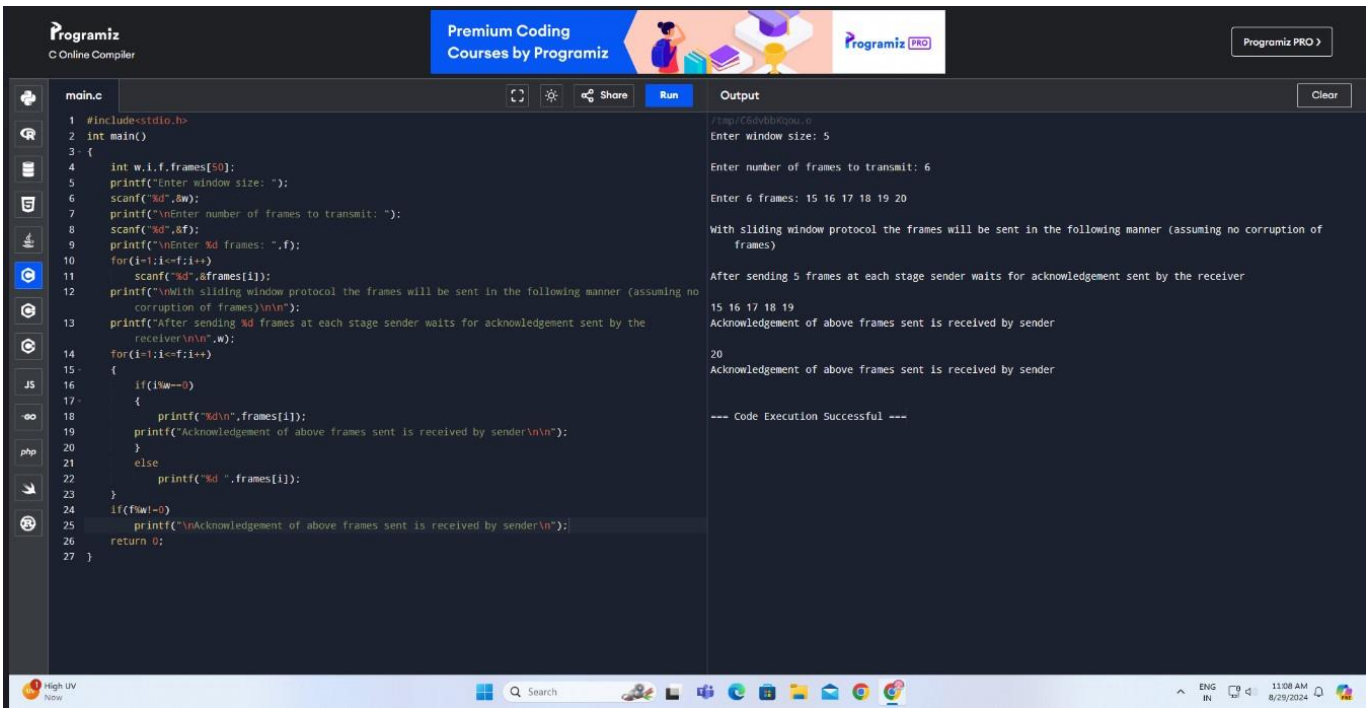
       for (i=1; i<=f; i++)
              scanf("%d", &frames[i]);
```

```
        printf("\n With sliding window protocol the frames will be sent in
the following manner (assuming no corruption of frames)\n\n)");
printf("After sending %d frames at each frames at each stage sender waits for
acknowledgement sent by the receiver \n\n", w);

        for(i=1; i<=f;i++)

        {
                if(i%w==0)
                {
                        printf("%d\n", frames[i]);
                }
                else
                        printf("%d\n", frames[i]);
        }
        if (f%w!=0)
        printf("\n Acknowledgement of above frames sent is received by sender
\n");
        return 0;
}
```

OUTPUT: -



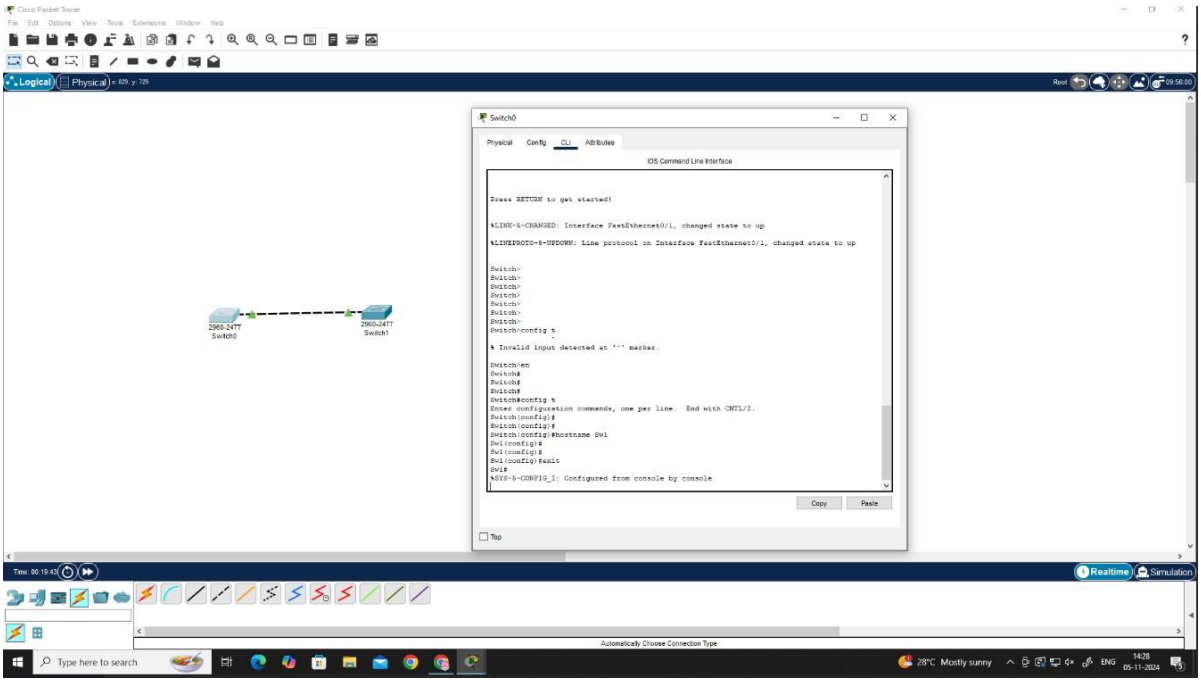
RESULT: -
The code for SLIDING WINDOW have been executed successfully and the output is verified.

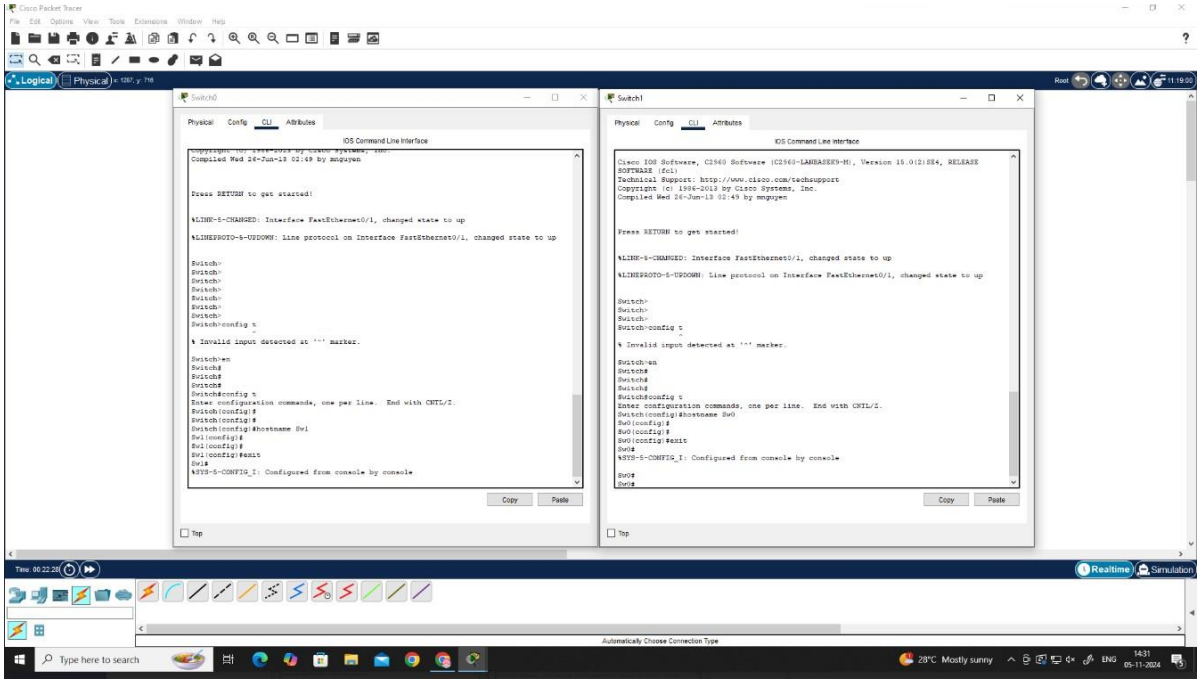
EXPERIMENT – 8

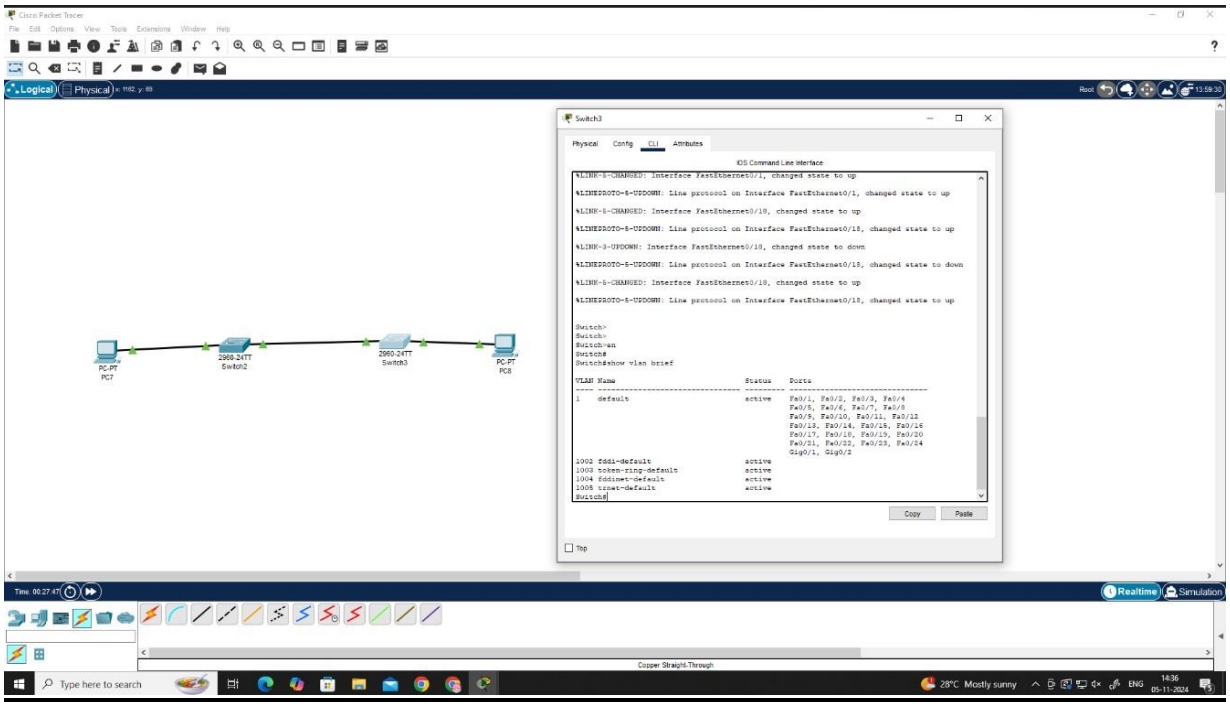
AIM: - a) Simulate Virtual LAN configuration using CISCO Packet Tracer Simulation.

Steps:
Step 1: Build the network as shown in the topology.
Step 2: Configure basic settings for each switch.
Step 3: Configure PC hosts.
Step 4: Test connectivity.

OUTPUT: -


Switch0
Physical
Config
CLI
Attributes
IOS Command Line Interface
Press RETURN to get started!
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
Switch>
Switch>config t
% Invalid input detected at '^' marker.
Switch>en
Switch#
Switch#config t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#
Switch(config)#hostname Sw1
Sw1(config)#
Sw1(config)#exit
Sw1#
%SYS-5-CONFIG_I: Configured from console by console
Copy
Paste
Top
2960-24TT
Switch0
2960-24TT
Switch1
Realtime
Simulation
Automatically Choose Connection Type
Type here to search
28°C Mostly sunny
ENG
14:28
05-11-2024


Switch0
Switch1
Physical
Config
CLI
Attributes
IOS Command Line Interface
Press RETURN to get started!
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
% Invalid input detected at '^' marker.
Switch(config)#hostname Sw1
Sw1(config)#exit
%SYS-5-CONFIG_I: Configured from console by console
Switch(config)#hostname Sw0
Sw0(config)#exit
Copy
Paste
Top
Realtime
Simulation
Automatically Choose Connection Type
Type here to search
28°C Mostly sunny
ENG
14:31
05-11-2024



RESULT: -

Simulation of virtual LAN configuration have been done successfully.

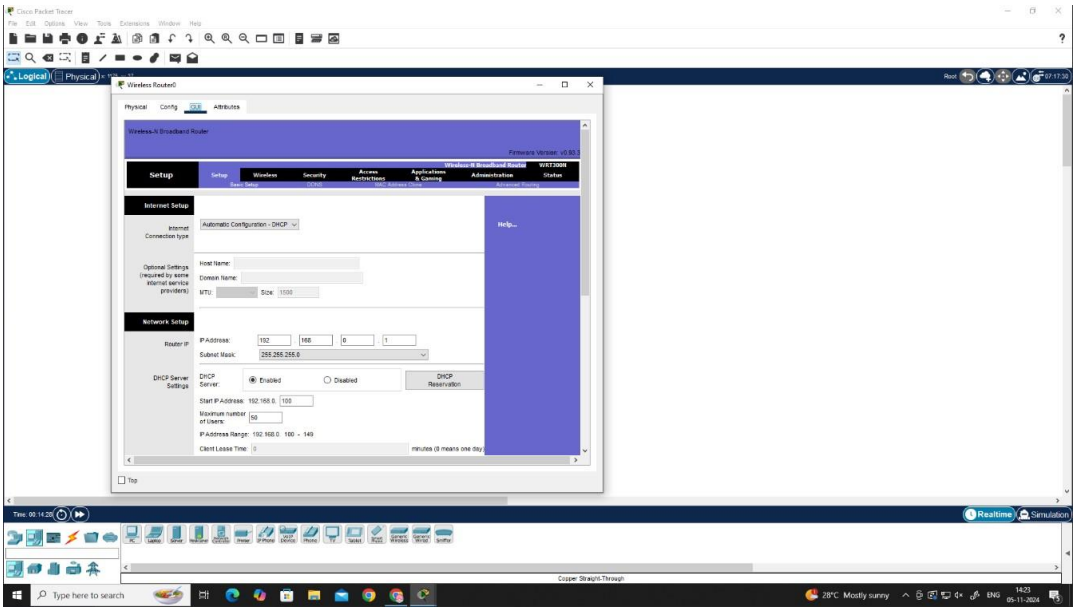
AIM: - b) Configuration of Wireless LAN using CISCO Packet Tracer.

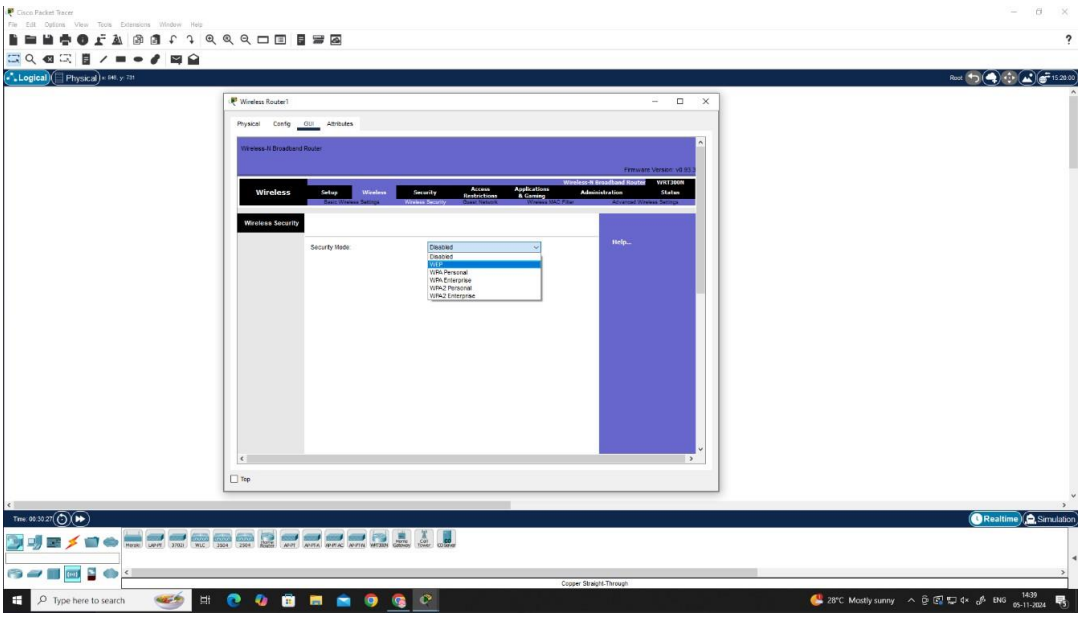
Steps:

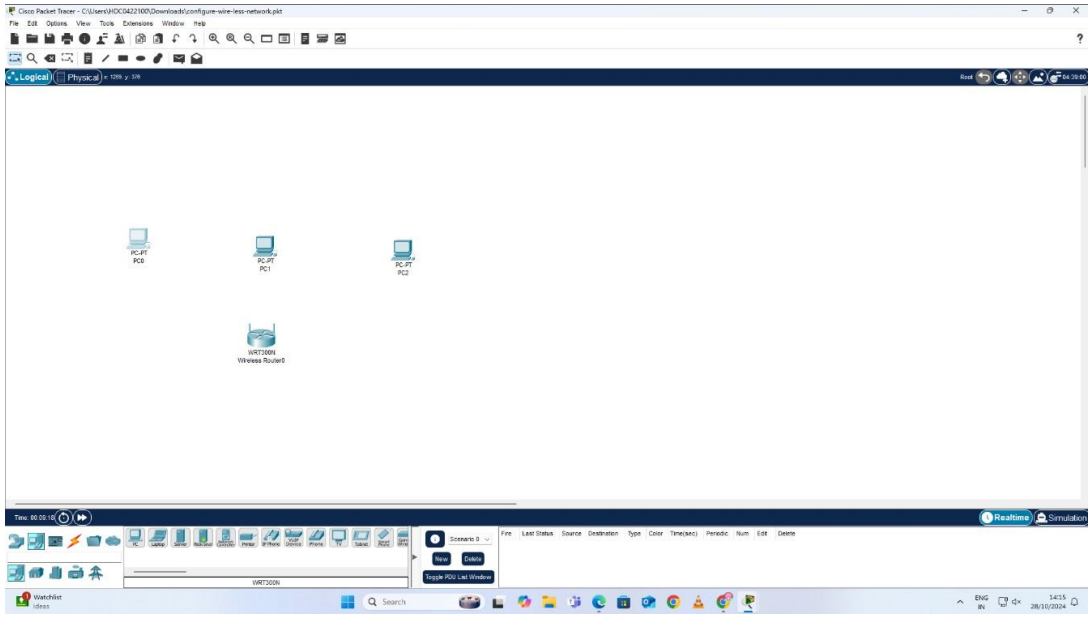
- Configure Static IP on PC and Wireless Router

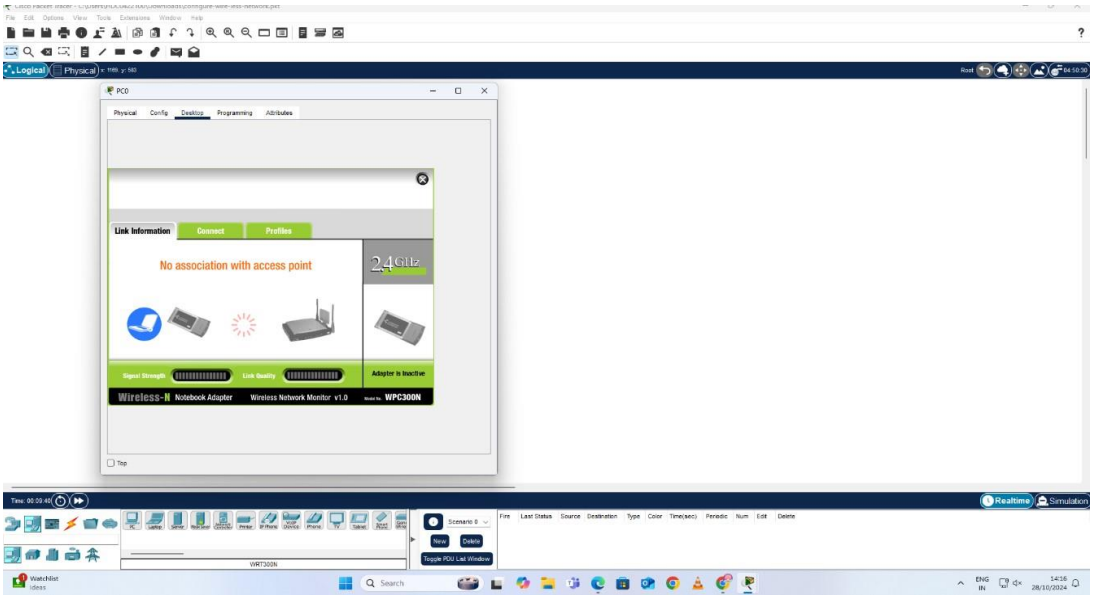
- Set SSID to MotherNetwork
- Set IP address of router to 192.168.0.1, PC0 to 192.168.0.2, PC1 to 192.168.0.3 and PC2 to 192.168.0.4.
- Secure your network by configuring WAP key on Router
- Connect PC by using WAP key

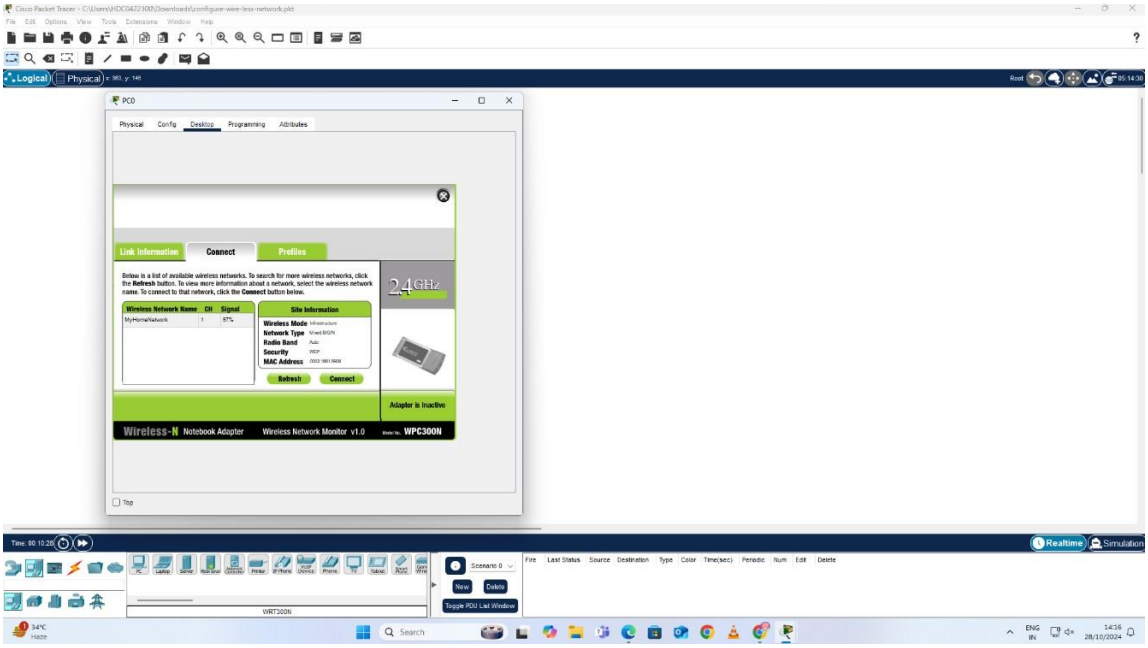
OUTPUT: -

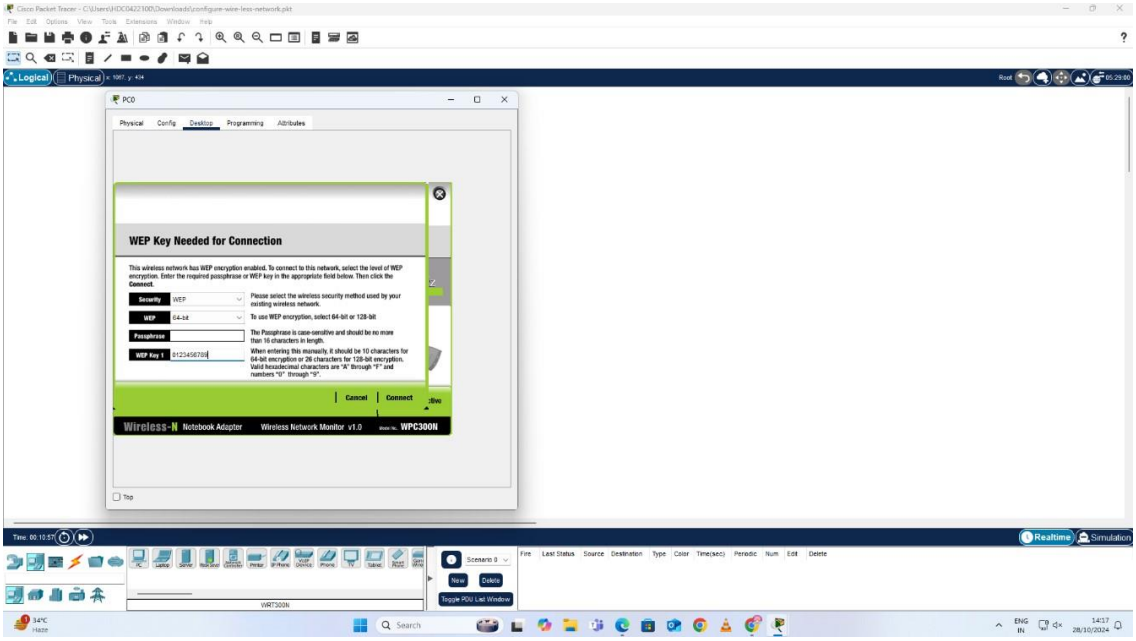


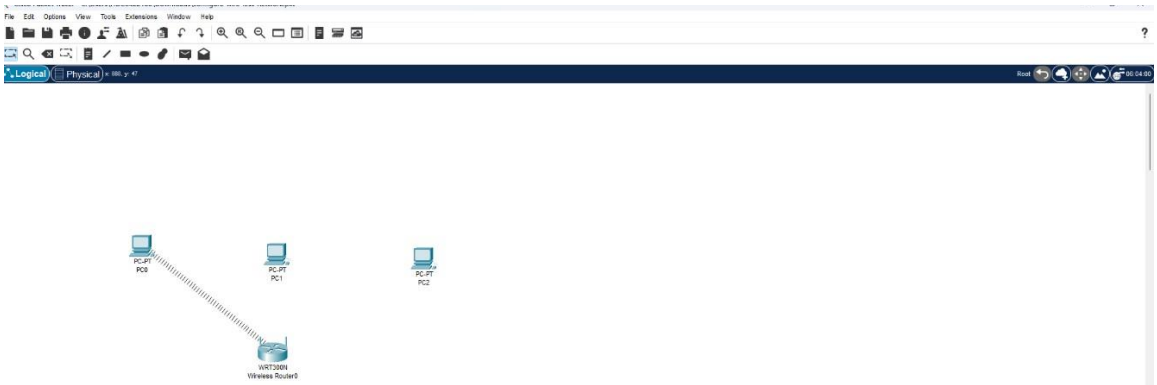


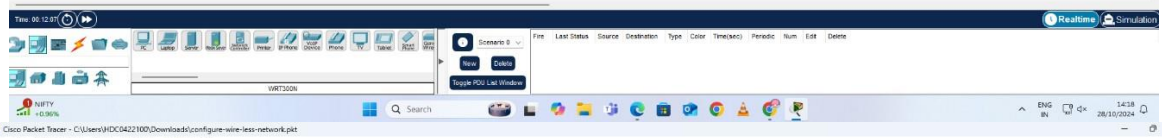

PC-PT PC0
PC-PT PC1
PC-PT PC2
WRT300N Wireless Router0


PC0
Physical
Config
Desktop
Programming
Attributes
Link Information
Connect
Profiles
No association with access point
2.4GHz
Signal Strength
Link Quality
Adapter is Inactive
Wireless-N Notebook Adapter
Wireless Network Monitor v1.0
WPC300N
Top


PC0
Physical
Config
Desktop
Programming
Attributes
Link Information
Connect
Profiles
Below is a list of available wireless networks. To search for more wireless networks, click the Refresh button. To view more information about a network, select the wireless network name. To connect to that network, click the Connect button below.
Wireless Network Name
CH
Signal
MyHomeNetwork
1
97%
Site Information
Wireless Mode
Network Type
Radio Band
Security
MAC Address
Refresh
Connect
2.4GHz
Adapter is Inactive
Wireless-N Notebook Adapter
Wireless Network Monitor v1.0
WPC300N
Top


PC0
Physical
Config
Desktop
Programming
Attributes
WEP Key Needed for Connection
This wireless network has WEP encryption enabled. To connect to this network, select the level of WEP encryption. Enter the required passphrase or WEP key in the appropriate field below. Then click the Connect.
Security
WEP
Please select the wireless security method used by your existing wireless network.
WEP
64-bit
To use WEP encryption, select 64-bit or 128-bit.
Passphrase
The Passphrase is case-sensitive and should be no more than 16 characters in length.
WEP Key 1
0123456789
When entering this manually, it should be 10 characters for 64-bit encryption or 26 characters for 128-bit encryption. Valid hexadecimal characters are "A" through "F" and numbers "0" through "9".
Cancel
Connect
Wireless-N Notebook Adapter
Wireless Network Monitor v1.0
WPC300N
Top
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
WRT300N
Search


PC-PT
PC0
PC-PT
PC1
PC-PT
PC2
WRT300N
Wireless Router0


Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
WRT300N
Search


PC-PT
PC0
PC-PT
PC1
PC-PT
PC2
WRT300N
Wireless Router0


Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
WRT300N
Search

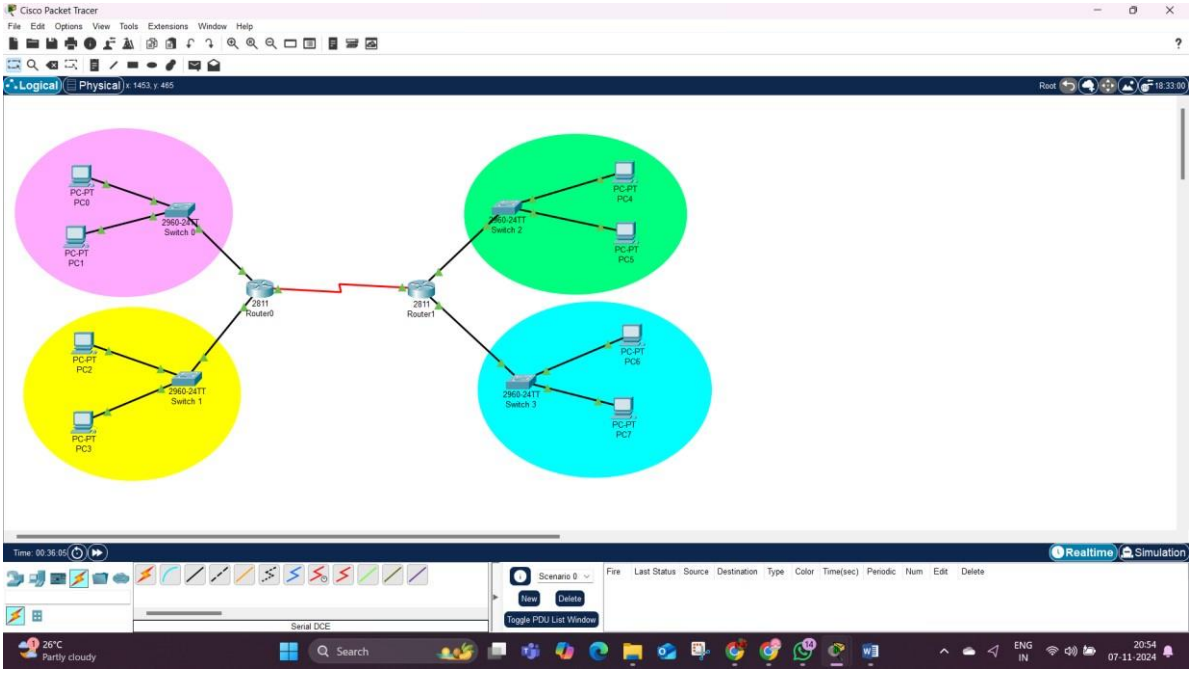
RESULT: -
Configuration of Wireless LAN using CISCO Packet Tracer have been done successfully and verified.

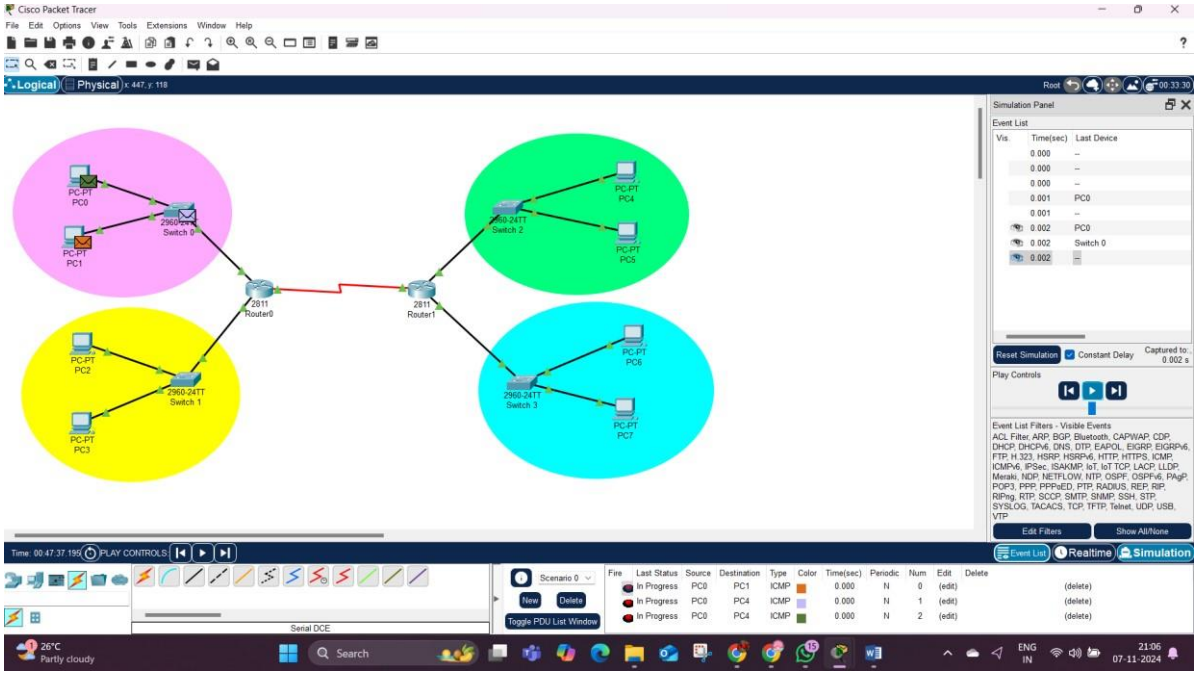
EXPERIMENT – 9

AIM: - Implementation of SUBNETTING in CISCO PACKET TRACER simulator.

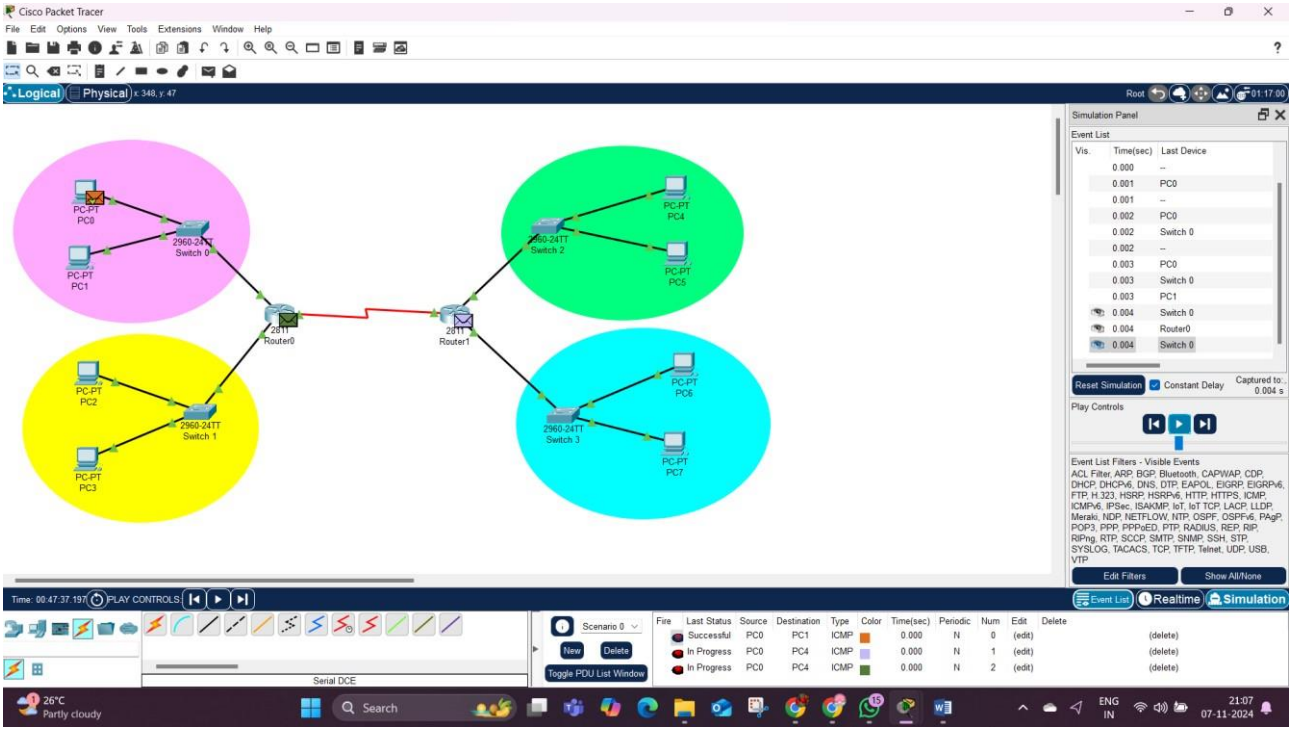
What is subnetting?
Classless IP subnetting is a technique that allows for more efficient use of IP addresses by allowing for subnet masks that are not just the default masks for each IP class. This means that we can divide our IP address space into smaller subnets, which can be useful when we have a limited number of IP addresses but need to create multiple networks.

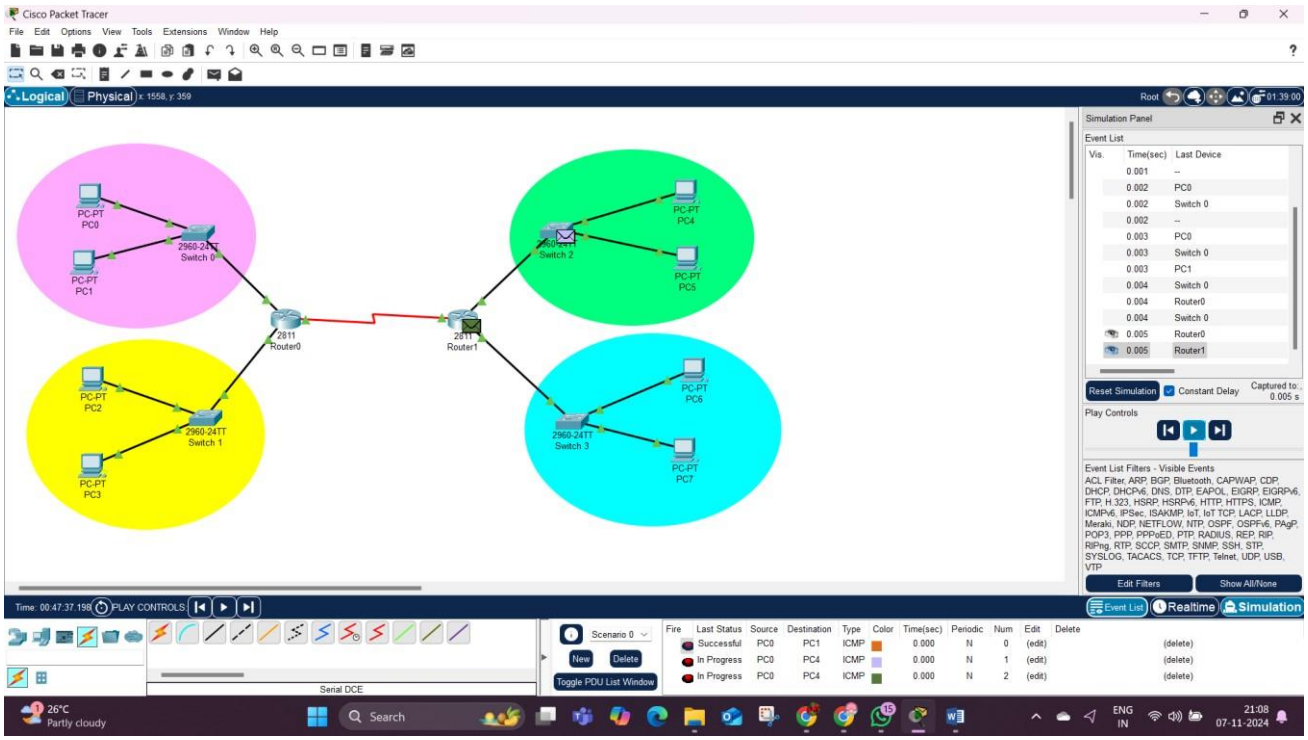
OUTPUT: -

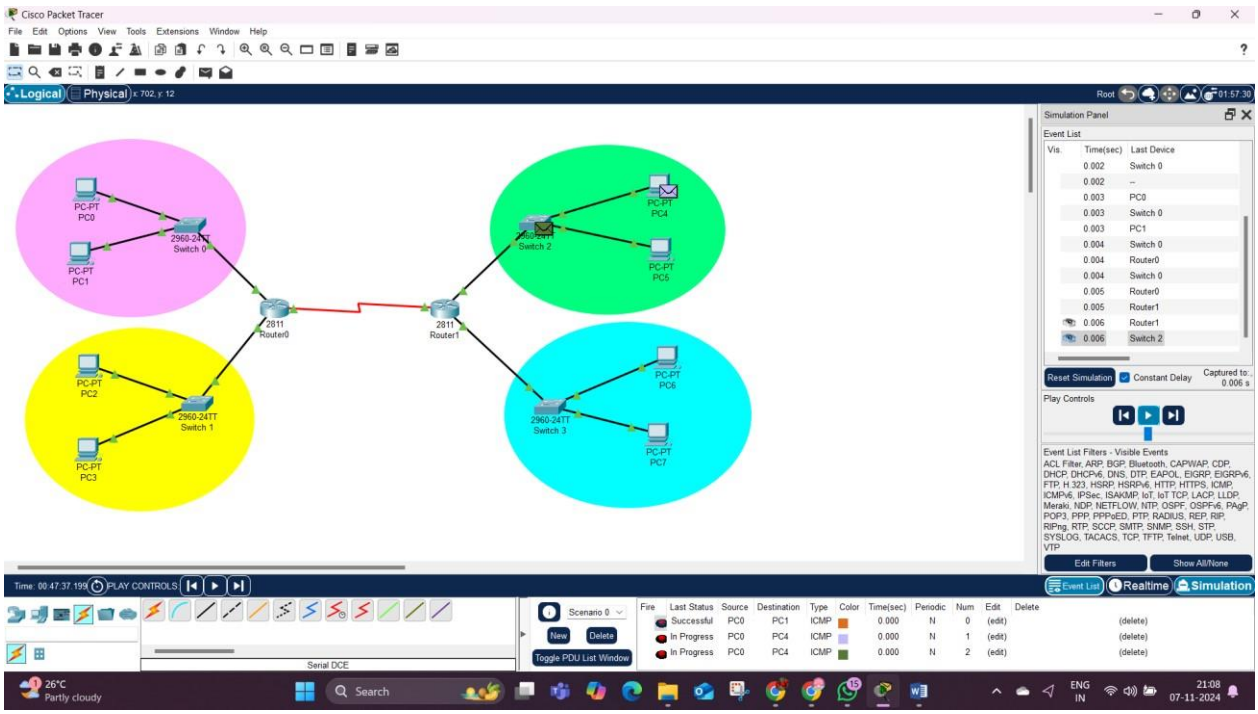


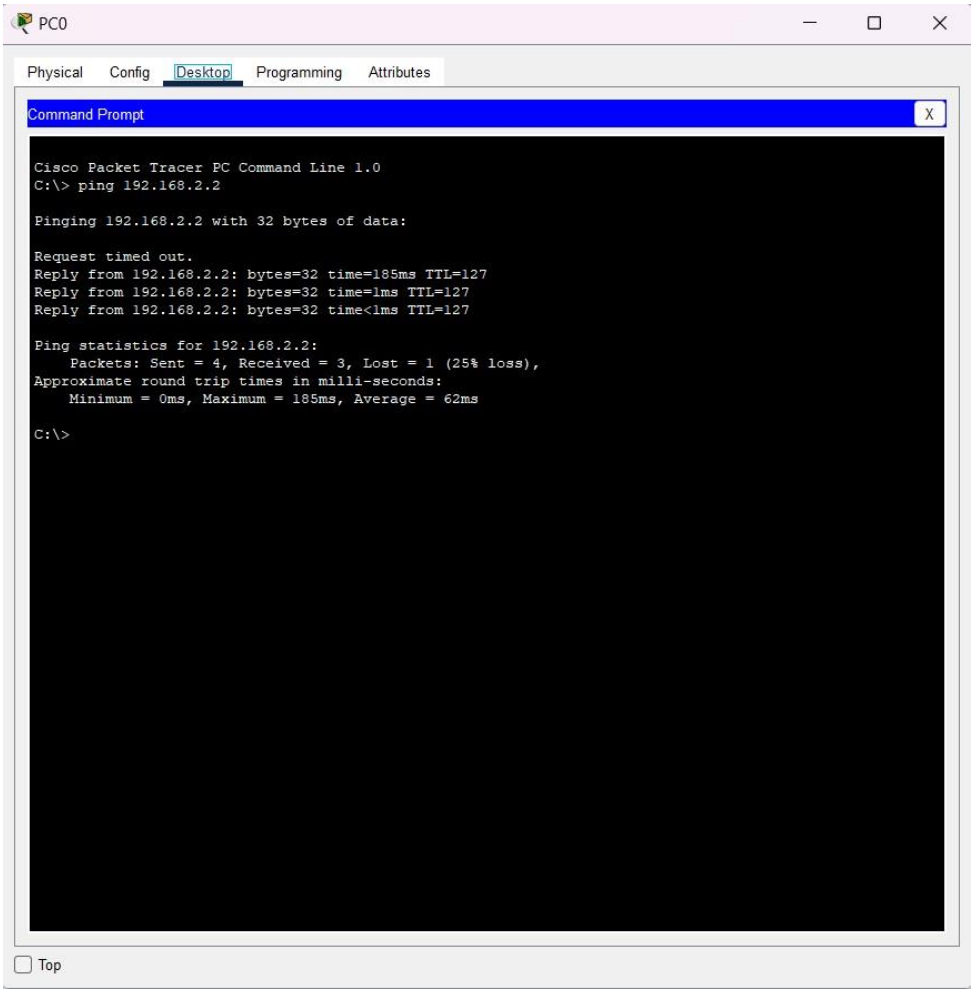


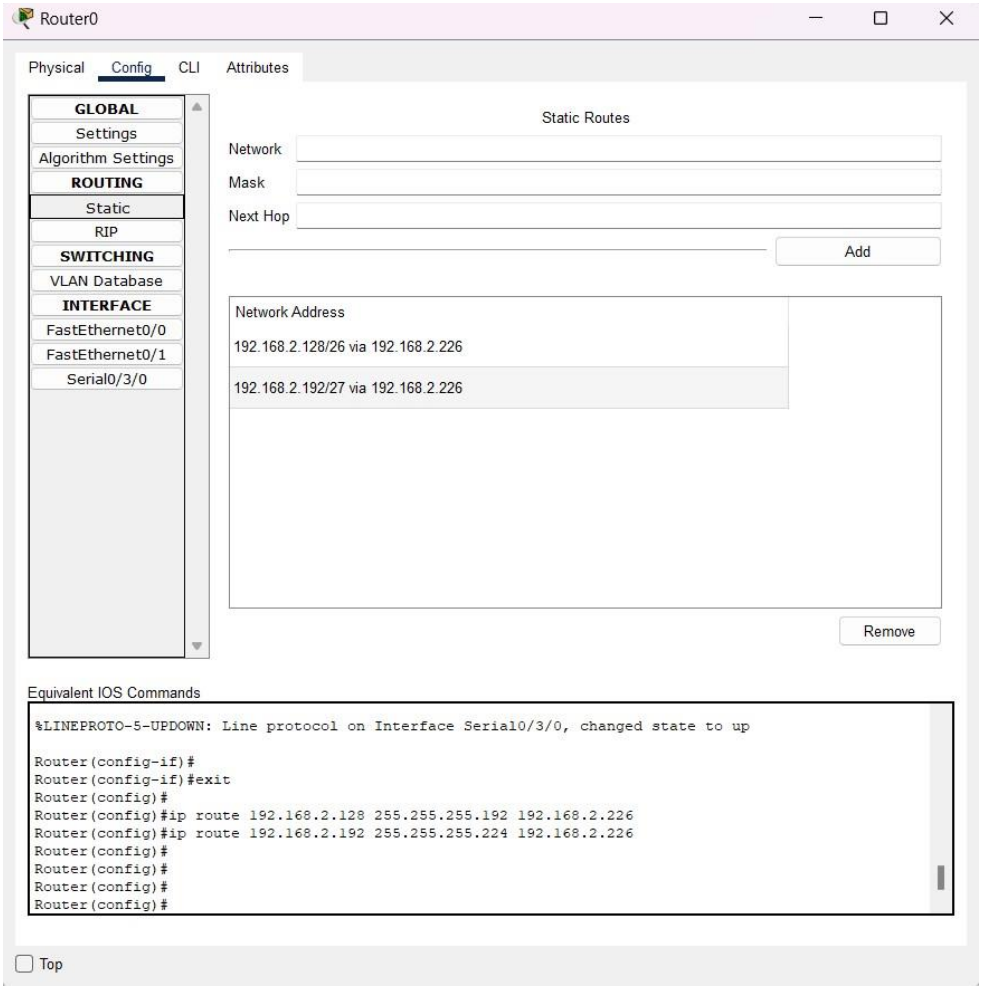
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC1	ICMP		0.000	N	0	(edit)	(delete)
	Failed	PC0	PC4	ICMP		0.000	N	1	(edit)	(delete)
	Successful	PC0	PC4	ICMP		0.000	N	2	(edit)	(delete)

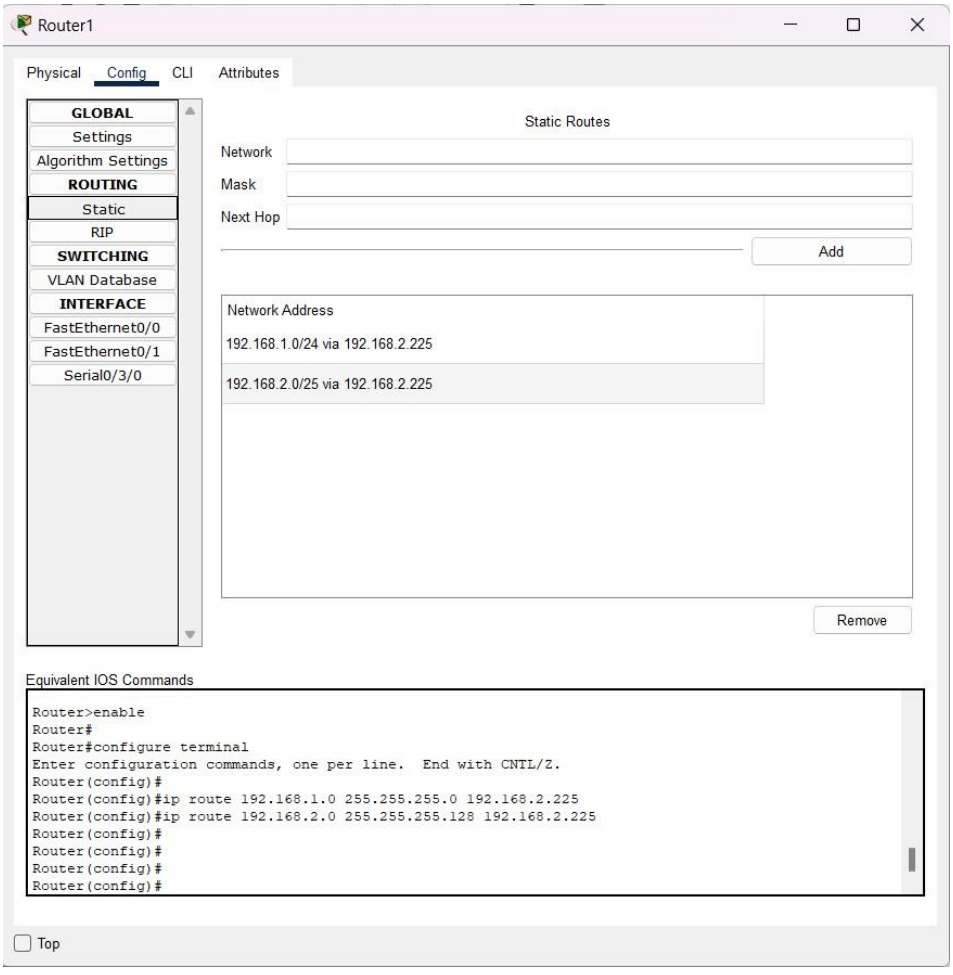

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical
PC-PT PC0
PC-PT PC1
2960-24TT Switch 0
2811 Router0
2811 Router1
2960-24TT Switch 2
PC-PT PC4
PC-PT PC5
PC-PT PC2
2960-24TT Switch 1
PC-PT PC3
2960-24TT Switch 3
PC-PT PC6
PC-PT PC7
Simulation Panel
Event List
Vis. Time(sec) Last Device
0.000 --
0.001 PC0
0.001 --
0.002 PC0
0.002 Switch 0
0.002 --
0.003 PC0
0.003 Switch 0
0.003 PC1
0.004 Switch 0
0.004 Router0
0.004 Switch 0
Reset Simulation
Constant Delay
Captured to: 0.004 s
Play Controls
Event List Filters - Visible Events
ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoED, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP
Edit Filters
Show All/None
Time: 00:47:37.197
PLAY CONTROLS
Event List
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete
Successful PC0 PC1 ICMP 0.000 N 0 (edit) (delete)
In Progress PC0 PC4 ICMP 0.000 N 1 (edit) (delete)
In Progress PC0 PC4 ICMP 0.000 N 2 (edit) (delete)
Serial DCE
26°C Partly cloudy
Search
ENG IN
21:07 07-11-2024

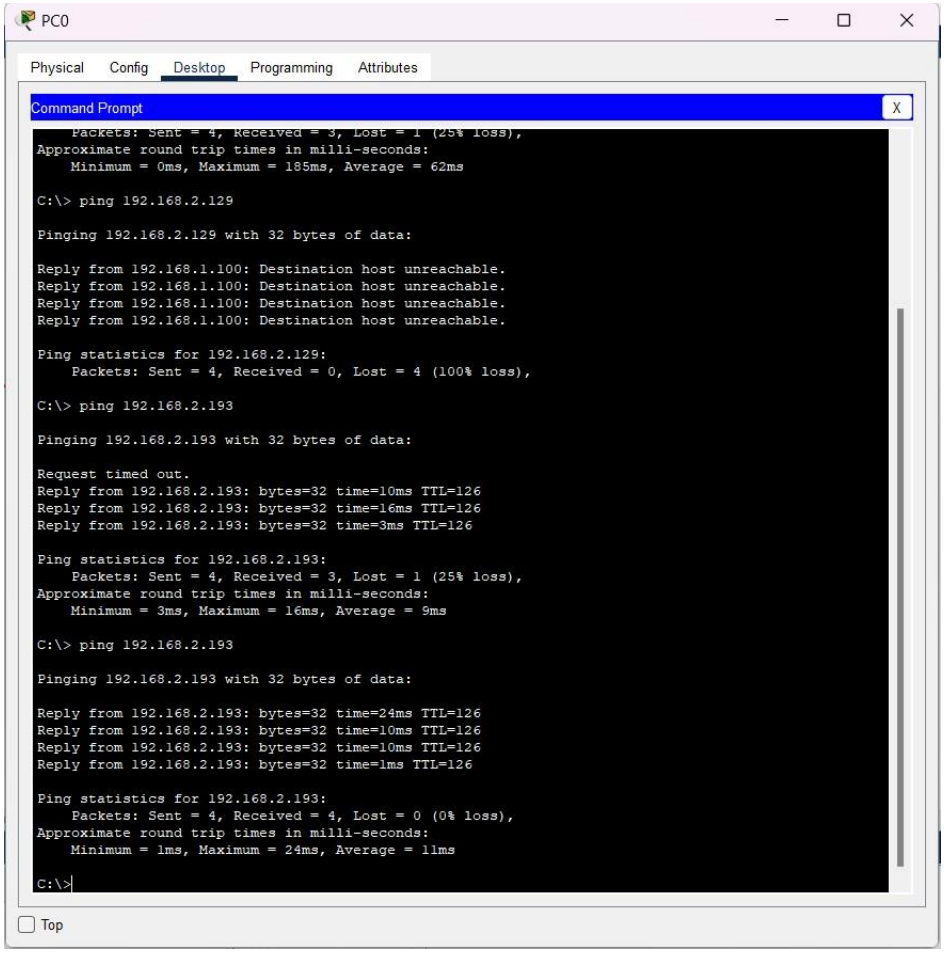

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical
PC-PT PC0
PC-PT PC1
2960-24TT Switch 0
2811 Router0
2811 Router1
2960-24TT Switch 2
PC-PT PC4
PC-PT PC5
PC-PT PC2
2960-24TT Switch 1
PC-PT PC3
2960-24TT Switch 3
PC-PT PC6
PC-PT PC7
Simulation Panel
Event List
Vis. Time(sec) Last Device
0.001 --
0.002 PC0
0.002 Switch 0
0.002 --
0.003 PC0
0.003 Switch 0
0.003 PC1
0.004 Switch 0
0.004 Router0
0.004 Switch 0
0.005 Router0
0.005 Router1
Reset Simulation
Constant Delay
Captured to: 0.005 s
Play Controls
Event List Filters - Visible Events
ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoED, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP
Edit Filters
Show All/None
Time: 00:47:37.198
PLAY CONTROLS
Event List
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete
Successful PC0 PC1 ICMP 0.000 N 0 (edit) (delete)
In Progress PC0 PC4 ICMP 0.000 N 1 (edit) (delete)
In Progress PC0 PC4 ICMP 0.000 N 2 (edit) (delete)
Serial DCE
26°C Partly cloudy
Search
ENG IN
21:08 07-11-2024


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical
PC-PT PC0
PC-PT PC1
2960-24TT Switch 0
2811 Router0
2811 Router1
Switch 2
PC-PT PC4
PC-PT PC5
PC-PT PC2
2960-24TT Switch 1
PC-PT PC3
2960-24TT Switch 3
PC-PT PC6
PC-PT PC7
Simulation Panel
Event List
Reset Simulation
Constant Delay
Play Controls
Edit Filters
Show All/None
Event List
Realtime
Simulation
Serial DCE
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete
Successful PC0 PC1 ICMP 0.000 N 0 (edit) (delete)
In Progress PC0 PC4 ICMP 0.000 N 1 (edit) (delete)
In Progress PC0 PC4 ICMP 0.000 N 2 (edit) (delete)
26°C Partly cloudy
Search
ENG IN
21:08 07-11-2024


PC0
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
Cisco Packet Tracer PC Command Line 1.0
C:\> ping 192.168.2.2
Pinging 192.168.2.2 with 32 bytes of data:
Request timed out.
Reply from 192.168.2.2: bytes=32 time=185ms TTL=127
Reply from 192.168.2.2: bytes=32 time=1ms TTL=127
Reply from 192.168.2.2: bytes=32 time<1ms TTL=127
Ping statistics for 192.168.2.2:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 185ms, Average = 62ms
C:\>
Top


Router0
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/0
FastEthernet0/1
Serial0/3/0
Static Routes
Network
Mask
Next Hop
Add
Network Address
192.168.2.128/26 via 192.168.2.226
192.168.2.192/27 via 192.168.2.226
Remove
Equivalent IOS Commands
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/3/0, changed state to up
Router(config-if)#
Router(config-if)#exit
Router(config)#
Router(config)#ip route 192.168.2.128 255.255.255.192 192.168.2.226
Router(config)#ip route 192.168.2.192 255.255.255.224 192.168.2.226
Router(config)#
Router(config)#
Router(config)#
Router(config)#
Top


Router1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/0
FastEthernet0/1
Serial0/3/0
Static Routes
Network
Mask
Next Hop
Add
Network Address
192.168.1.0/24 via 192.168.2.225
192.168.2.0/25 via 192.168.2.225
Remove
Equivalent IOS Commands
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#
Router(config)#ip route 192.168.1.0 255.255.255.0 192.168.2.225
Router(config)#ip route 192.168.2.0 255.255.255.128 192.168.2.225
Router(config)#
Router(config)#
Router(config)#
Router(config)#
Top



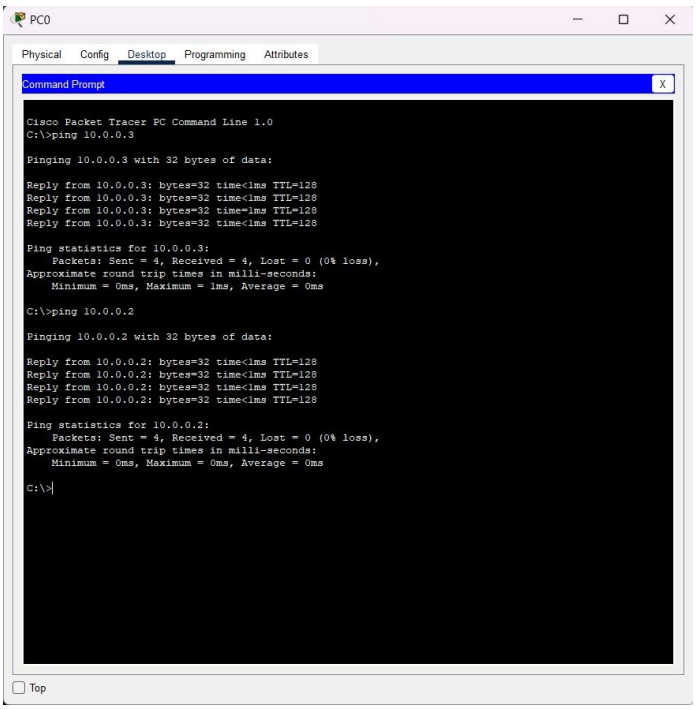
RESULT: -

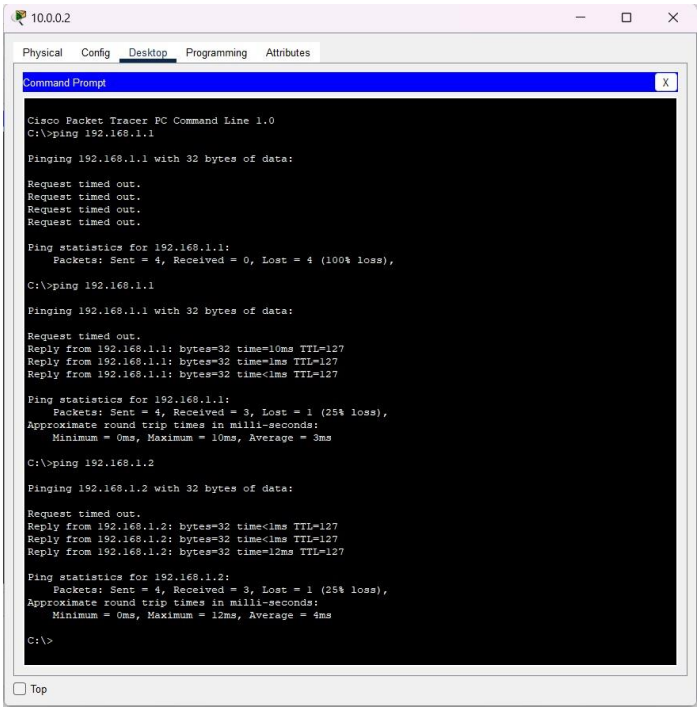
Implementation of SUBNETTING in CISCO PACKET TRACER simulator have been done successfully

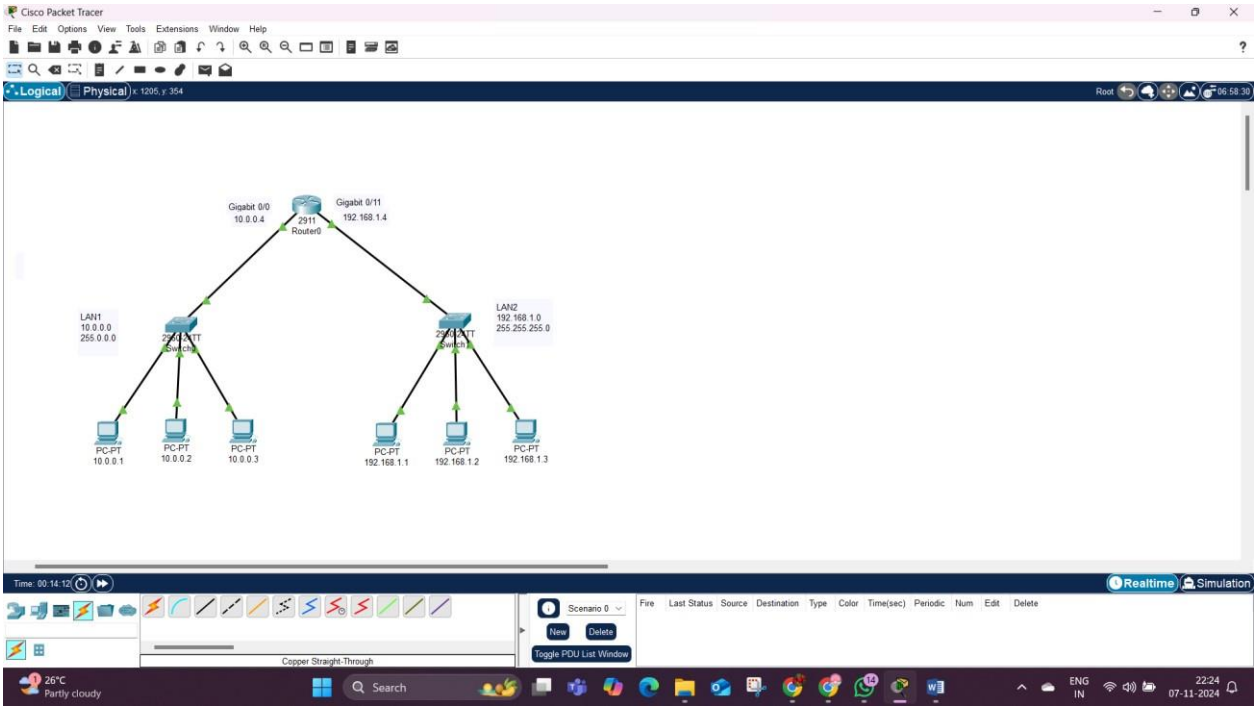
EXPERIMENT _ 10

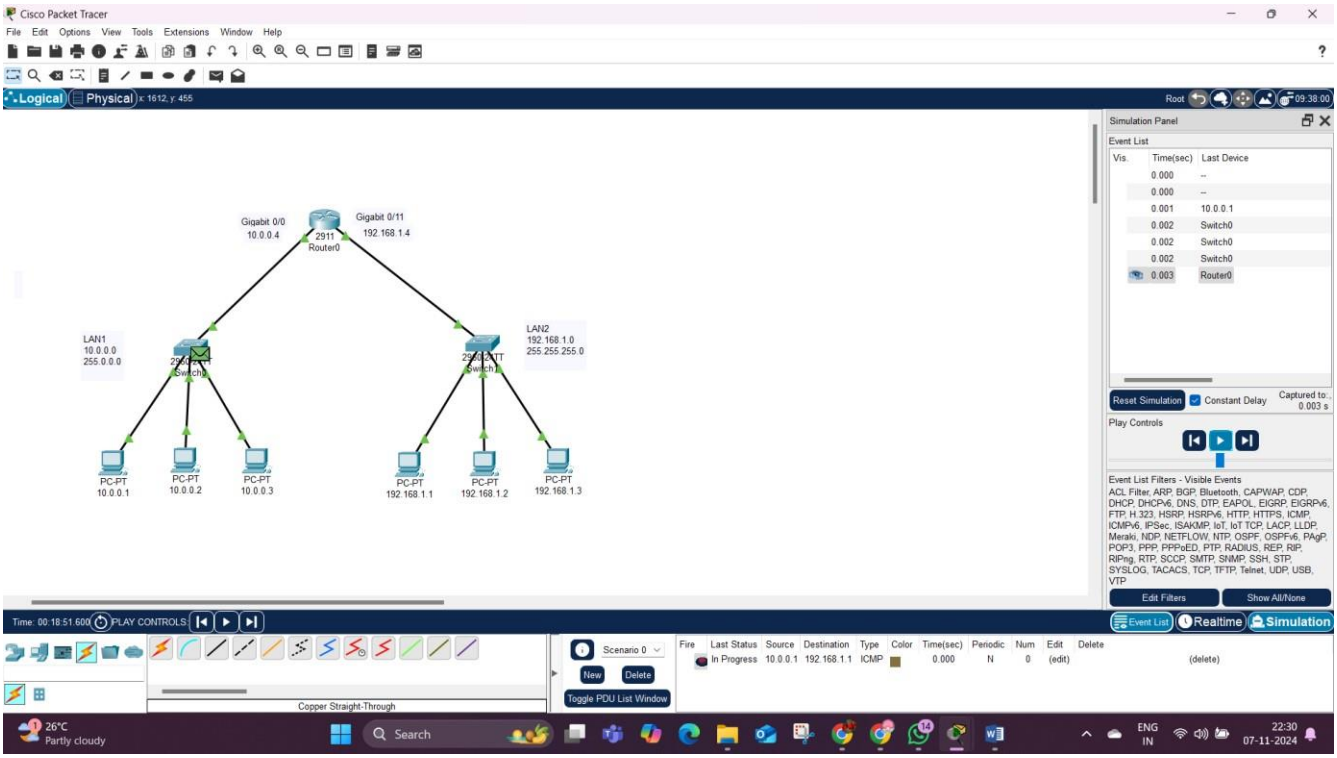
AIM: - a) Internetworking with routers in CISCO PACKET TRACER simulator.

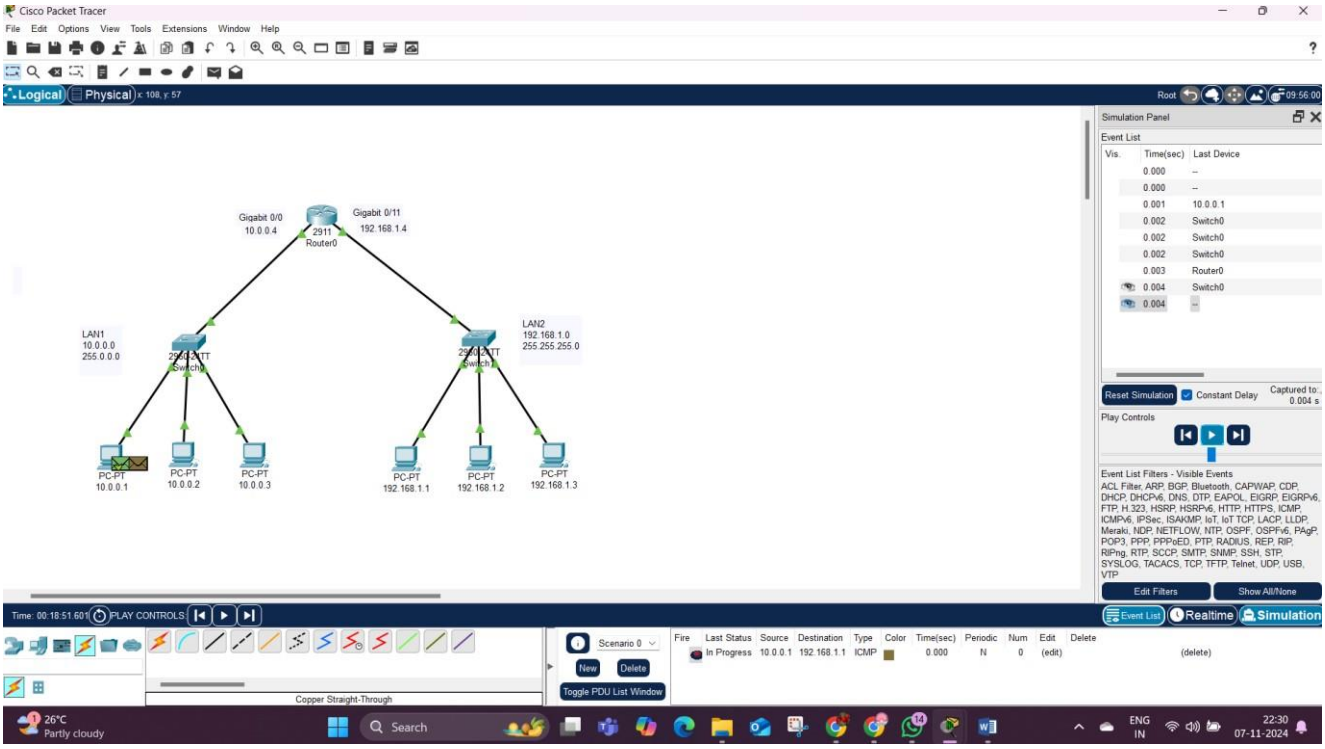
OUTPUT: -

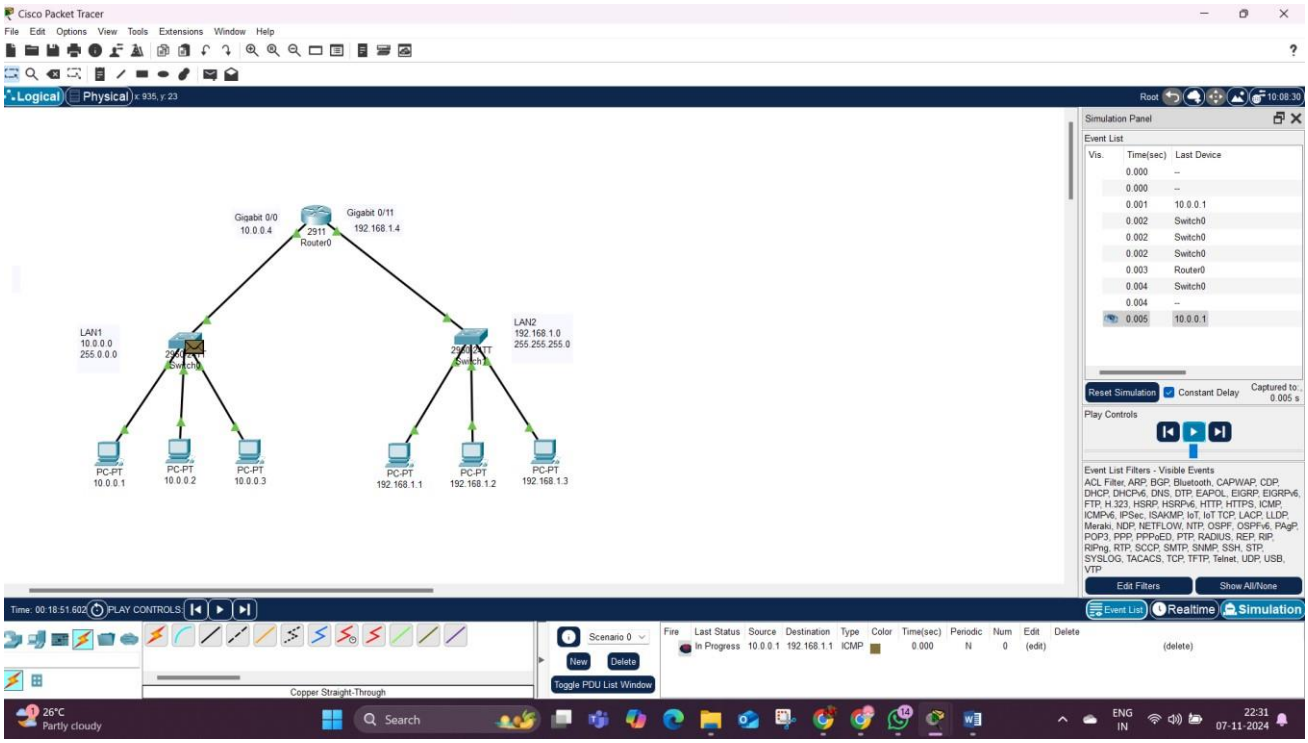


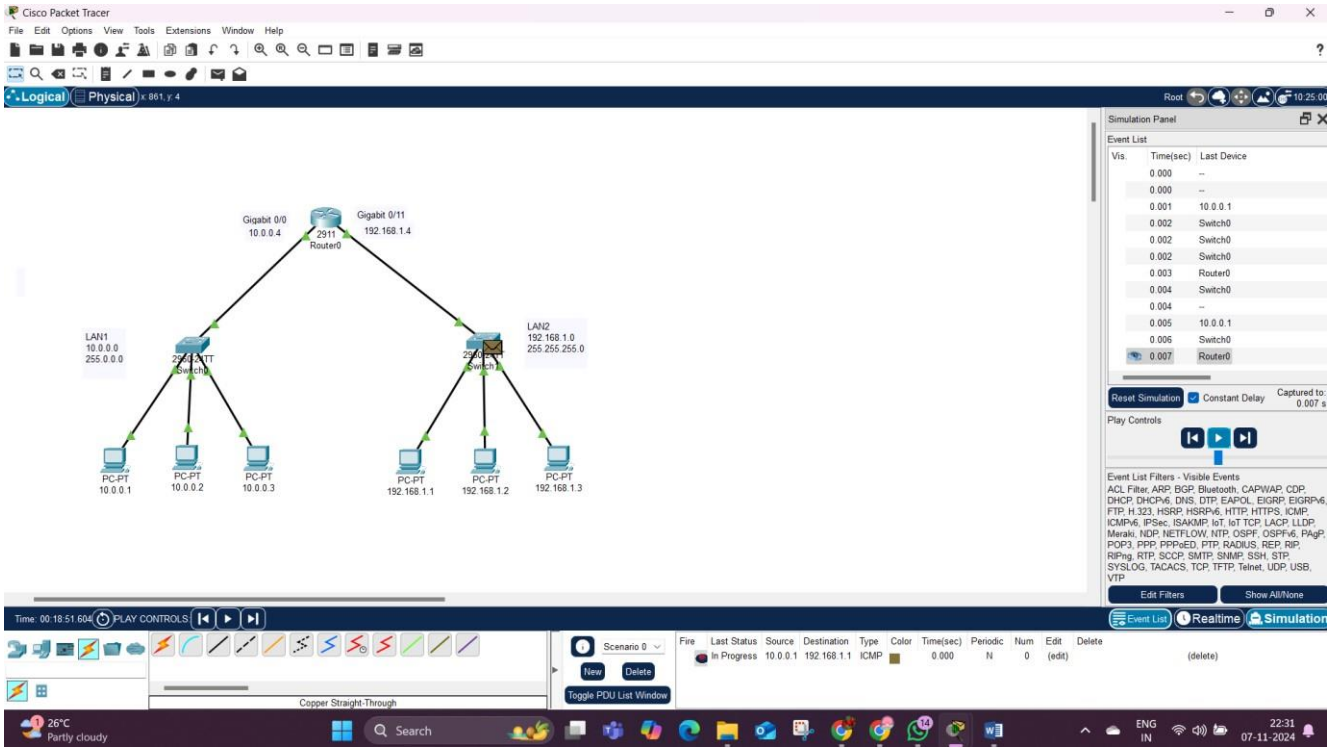


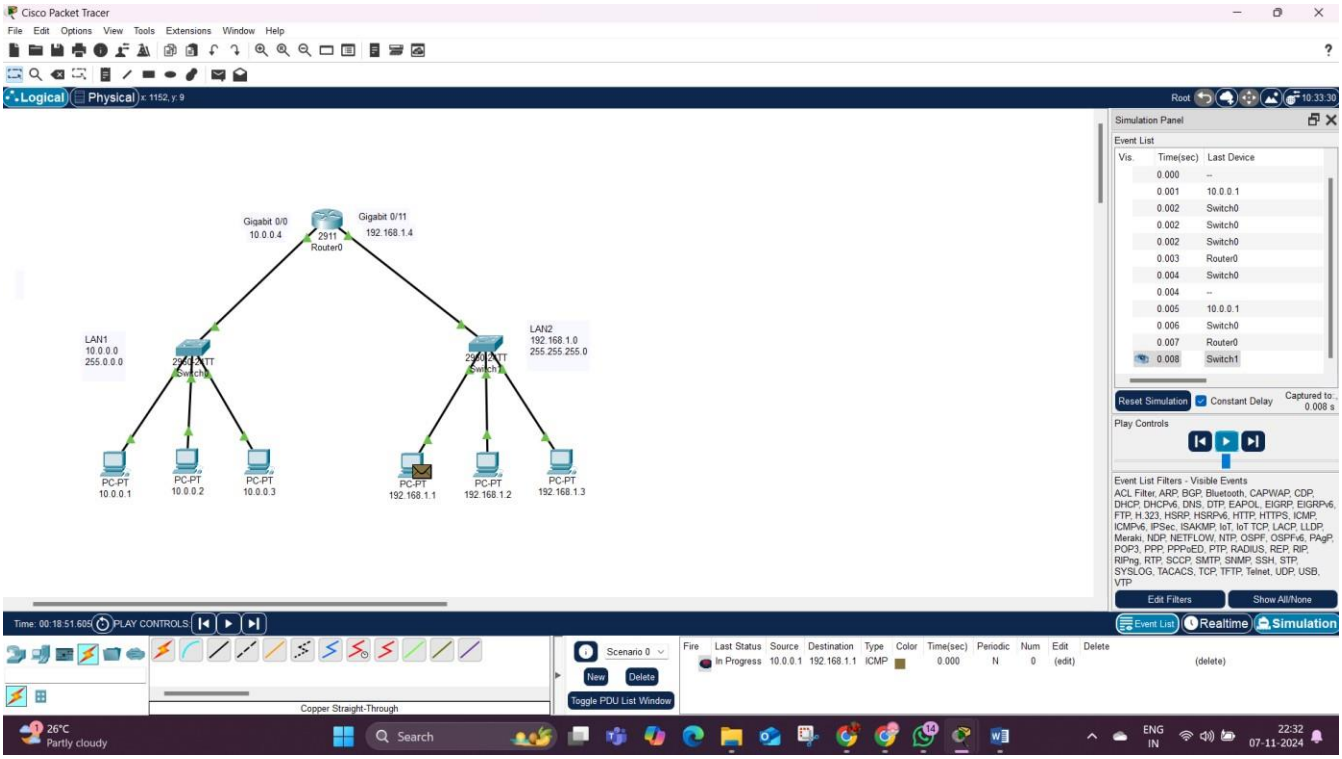


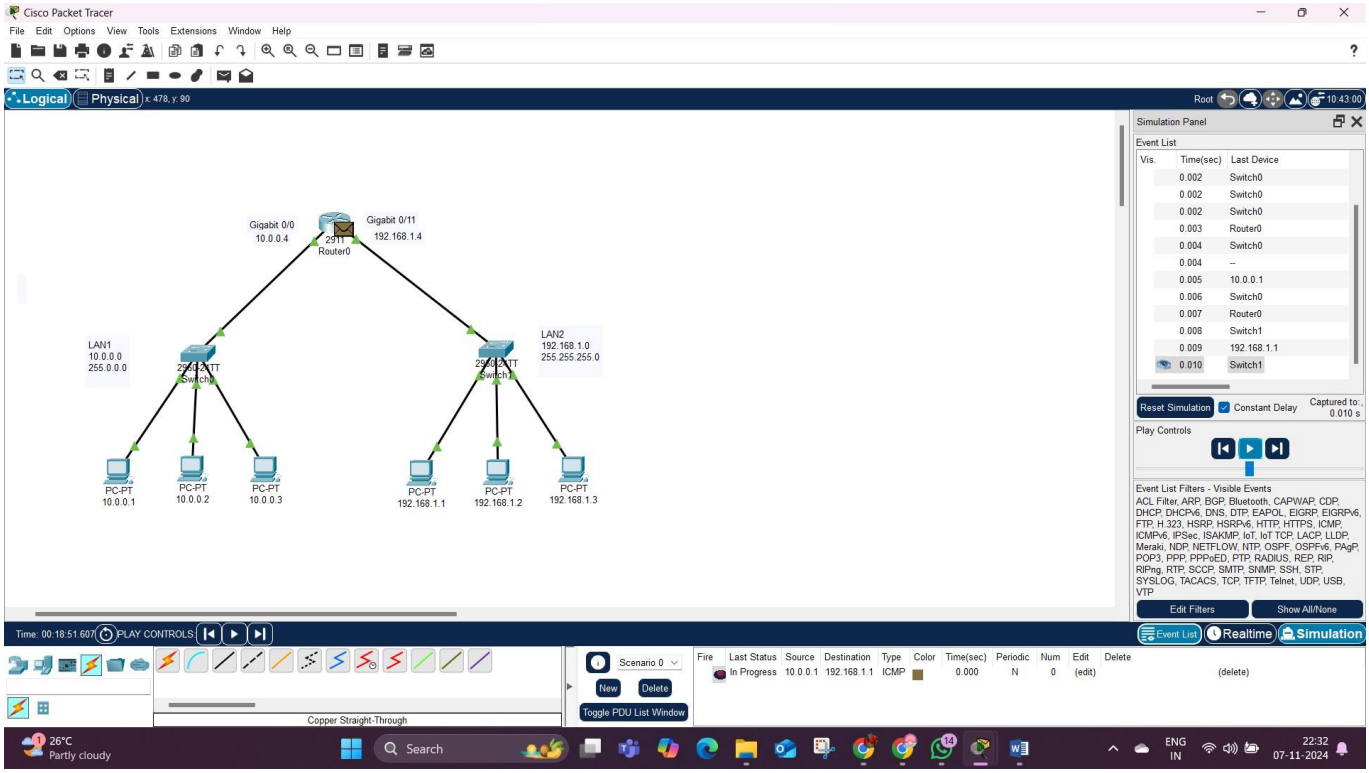

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical
Gigabit 0/0
10.0.0.4
2911
Router0
Gigabit 0/11
192.168.1.4
LAN1
10.0.0.0
255.0.0.0
LAN2
192.168.1.0
255.255.255.0
PC-PT
10.0.0.1
PC-PT
10.0.0.2
PC-PT
10.0.0.3
PC-PT
192.168.1.1
PC-PT
192.168.1.2
PC-PT
192.168.1.3
Simulation Panel
Event List
Vis. Time(sec) Last Device
0.000 --
0.000 --
0.001 10.0.0.1
0.002 Switch0
0.002 Switch0
0.002 Switch0
0.003 Router0
Reset Simulation
Constant Delay
Play Controls
Event List Filters - Visible Events
Edit Filters
Show All/None
Realtime
Simulation
Copper Straight-Through
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete
In Progress 10.0.0.1 192.168.1.1 ICMP 0.000 N 0 (edit) (delete)
26°C
Partly cloudy
Search
ENG
IN
22:30
07-11-2024

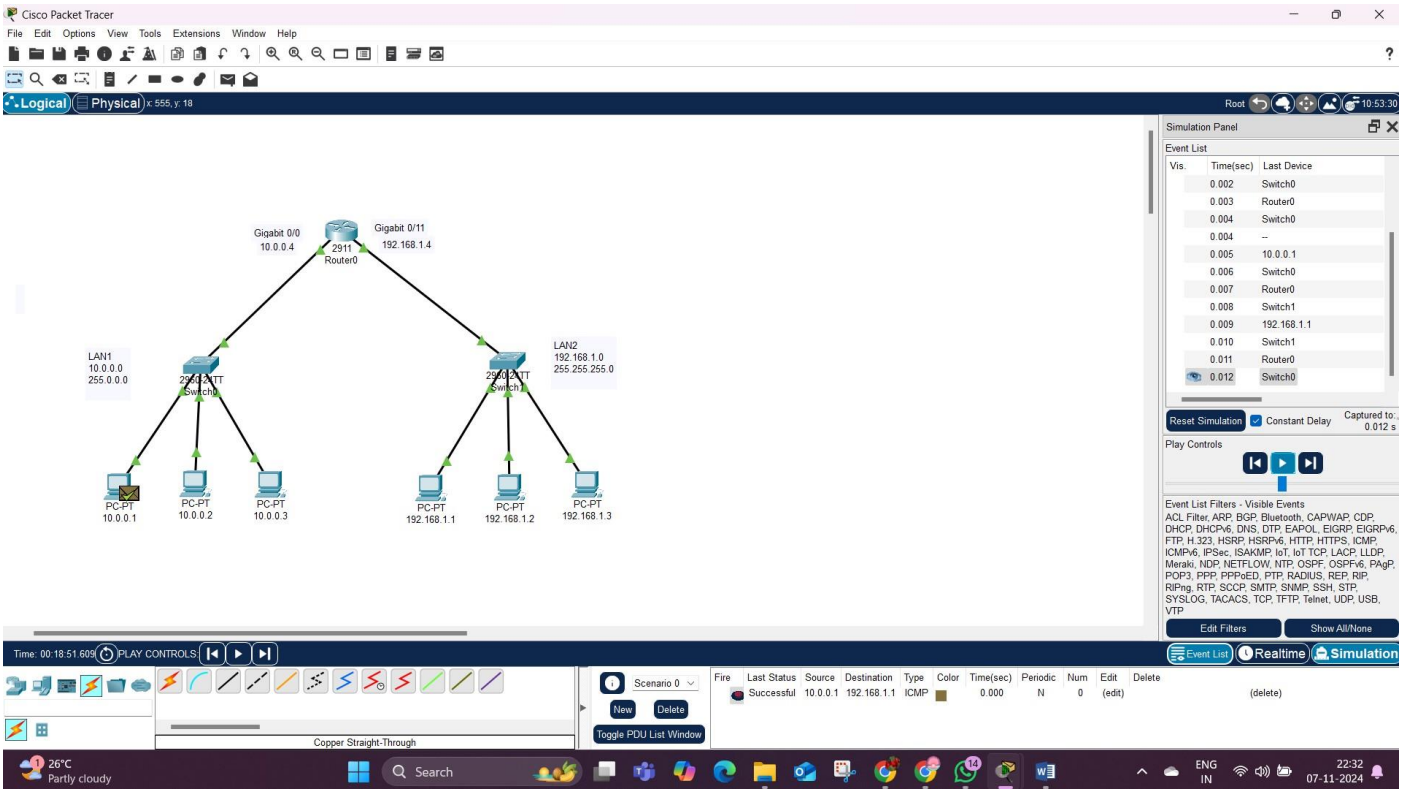

Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical
Gigabit 0/0
10.0.0.4
2911
Router0
Gigabit 0/11
192.168.1.4
LAN1
10.0.0.0
255.0.0.0
LAN2
192.168.1.0
255.255.255.0
PC-PT
10.0.0.1
PC-PT
10.0.0.2
PC-PT
10.0.0.3
PC-PT
192.168.1.1
PC-PT
192.168.1.2
PC-PT
192.168.1.3
Simulation Panel
Event List
Vis. Time(sec) Last Device
0.000 --
0.000 --
0.001 10.0.0.1
0.002 Switch0
0.002 Switch0
0.002 Switch0
0.003 Router0
0.004 Switch0
0.004 --
Reset Simulation
Constant Delay
Play Controls
Event List Filters - Visible Events
Edit Filters
Show All/None
Realtime
Simulation
Copper Straight-Through
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete
In Progress 10.0.0.1 192.168.1.1 ICMP 0.000 N 0 (edit) (delete)
26°C
Partly cloudy
Search
ENG
IN
22:30
07-11-2024


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical
Gigabit 0/0
10.0.0.4
2911
Router0
Gigabit 0/11
192.168.1.4
LAN1
10.0.0.0
255.0.0.0
LAN2
192.168.1.0
255.255.255.0
PC-PT
10.0.0.1
PC-PT
10.0.0.2
PC-PT
10.0.0.3
PC-PT
192.168.1.1
PC-PT
192.168.1.2
PC-PT
192.168.1.3
Simulation Panel
Event List
Vis. Time(sec) Last Device
Reset Simulation
Constant Delay
Play Controls
Event List Filters - Visible Events
Edit Filters
Show All/None
Event List
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Copper Straight-Through
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete
In Progress 10.0.0.1 192.168.1.1 ICMP 0.000 N 0 (edit) (delete)
26°C
Partly cloudy
Search
ENG
IN
22:31
07-11-2024


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical
Gigabit 0/0
10.0.0.4
2911
Router0
Gigabit 0/11
192.168.1.4
LAN1
10.0.0.0
255.0.0.0
LAN2
192.168.1.0
255.255.255.0
PC-PT
10.0.0.1
PC-PT
10.0.0.2
PC-PT
10.0.0.3
PC-PT
192.168.1.1
PC-PT
192.168.1.2
PC-PT
192.168.1.3
Simulation Panel
Event List
Vis. Time(sec) Last Device
Reset Simulation
Constant Delay
Play Controls
Event List Filters - Visible Events
Edit Filters
Show All/None
Event List
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Copper Straight-Through
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete
In Progress 10.0.0.1 192.168.1.1 ICMP 0.000 N 0 (edit) (delete)
26°C
Partly cloudy
Search
ENG
IN
22:31
07-11-2024


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical
Root
Gigabit 0/0
10.0.0.4
Gigabit 0/11
192.168.1.4
2911
Router0
LAN1
10.0.0.0
255.0.0.0
LAN2
192.168.1.0
255.255.255.0
PC-PT
10.0.0.1
PC-PT
10.0.0.2
PC-PT
10.0.0.3
PC-PT
192.168.1.1
PC-PT
192.168.1.2
PC-PT
192.168.1.3
Simulation Panel
Event List
Vis. Time(sec) Last Device
0.000 --
0.001 10.0.0.1
0.002 Switch0
0.002 Switch0
0.002 Switch0
0.003 Router0
0.004 Switch0
0.004 --
0.005 10.0.0.1
0.006 Switch0
0.007 Router0
0.008 Switch1
Reset Simulation
Constant Delay
Captured to: 0.008 s
Play Controls
Event List Filters - Visible Events
ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoED, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP
Edit Filters
Show All/None
Time: 00:18:51.605
PLAY CONTROLS
Event List
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete
In Progress 10.0.0.1 192.168.1.1 ICMP 0.000 N 0 (edit) (delete)
Copper Straight-Through
26°C
Partly cloudy
Search
ENG
IN
22:32
07-11-2024


Cisco Packet Tracer
File Edit Options View Tools Extensions Window Help
Logical Physical
Root
Gigabit 0/0
10.0.0.4
Gigabit 0/11
192.168.1.4
2911
Router0
LAN1
10.0.0.0
255.0.0.0
LAN2
192.168.1.0
255.255.255.0
PC-PT
10.0.0.1
PC-PT
10.0.0.2
PC-PT
10.0.0.3
PC-PT
192.168.1.1
PC-PT
192.168.1.2
PC-PT
192.168.1.3
Simulation Panel
Event List
Vis. Time(sec) Last Device
0.002 Switch0
0.002 Switch0
0.002 Switch0
0.003 Router0
0.004 Switch0
0.004 --
0.005 10.0.0.1
0.006 Switch0
0.007 Router0
0.008 Switch1
0.009 192.168.1.1
0.010 Switch1
Reset Simulation
Constant Delay
Captured to: 0.010 s
Play Controls
Event List Filters - Visible Events
ACL Filter, ARP, BGP, Bluetooth, CAPWAP, CDP, DHCP, DHCPv6, DNS, DTP, EAPOL, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPSec, ISAKMP, IoT, IoT TCP, LACP, LLDP, Meraki, NDP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, PPP, PPPoED, PTP, RADIUS, REP, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, USB, VTP
Edit Filters
Show All/None
Time: 00:18:51.607
PLAY CONTROLS
Event List
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete
In Progress 10.0.0.1 192.168.1.1 ICMP 0.000 N 0 (edit) (delete)
Copper Straight-Through
26°C
Partly cloudy
Search
ENG
IN
22:32
07-11-2024



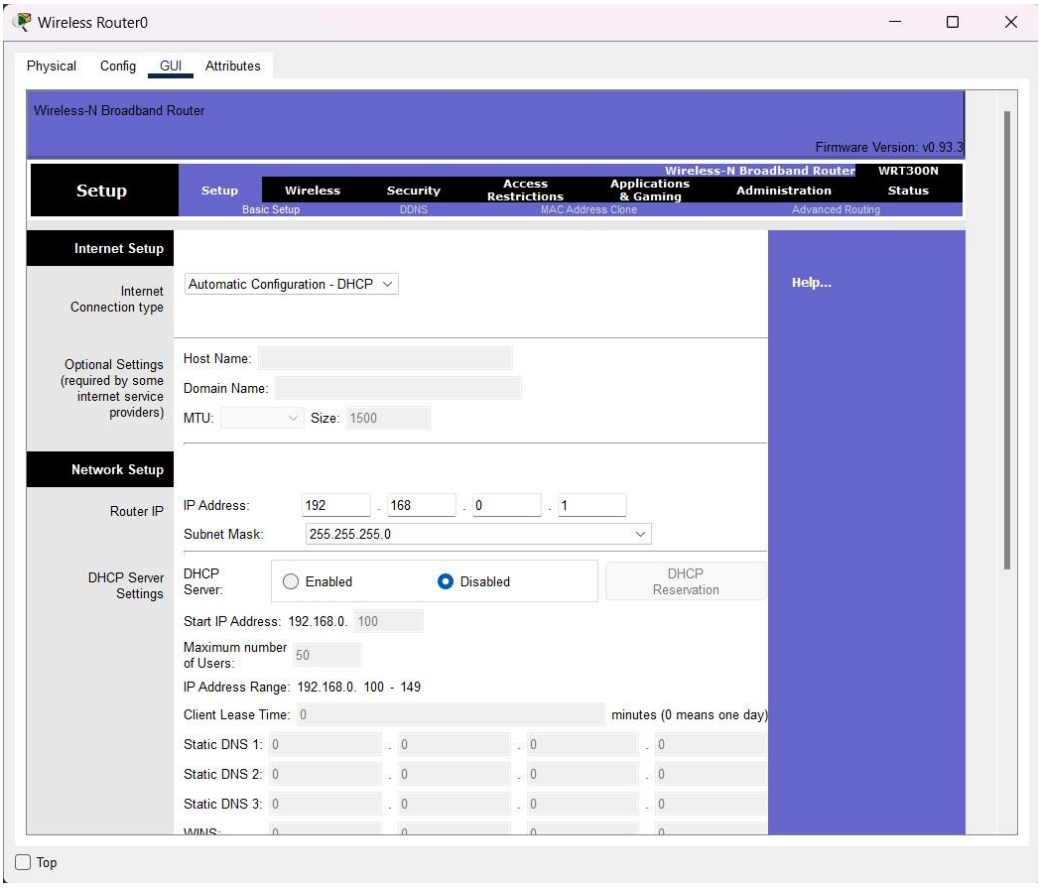
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	10.0.0.1	192.168.1.1	ICMP		0.000	N	0	(edit)	(delete)

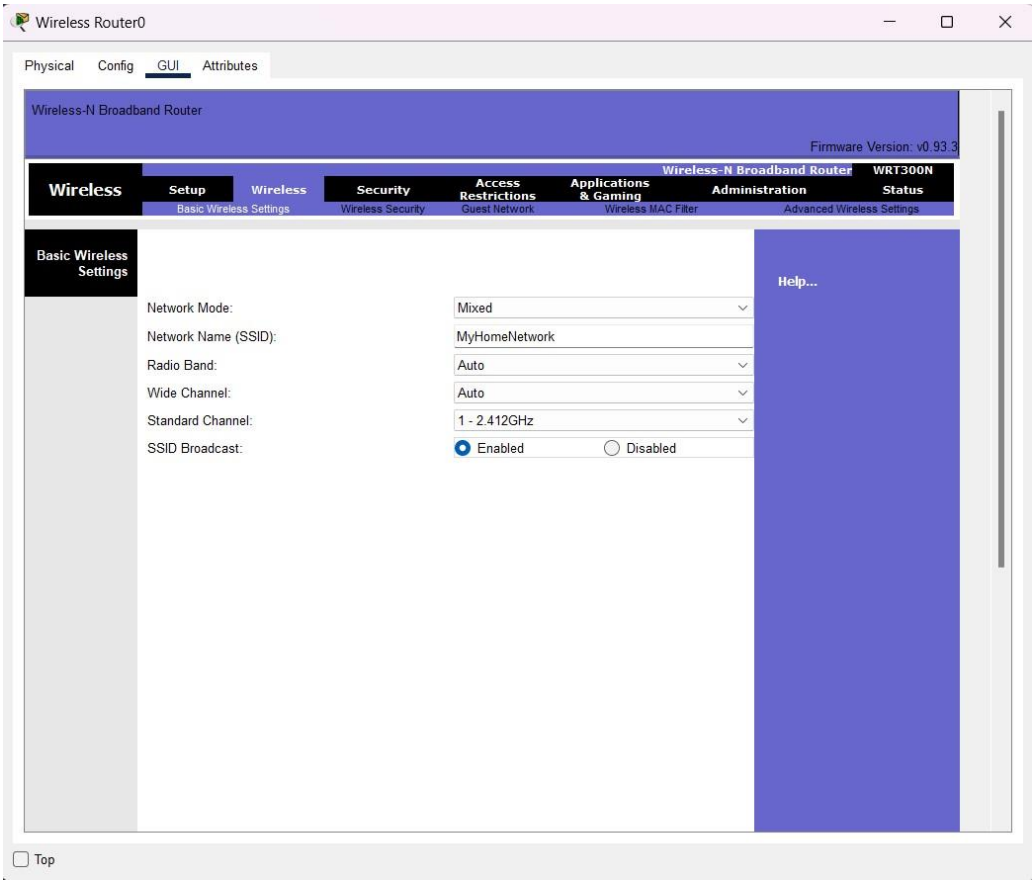
RESULT: -

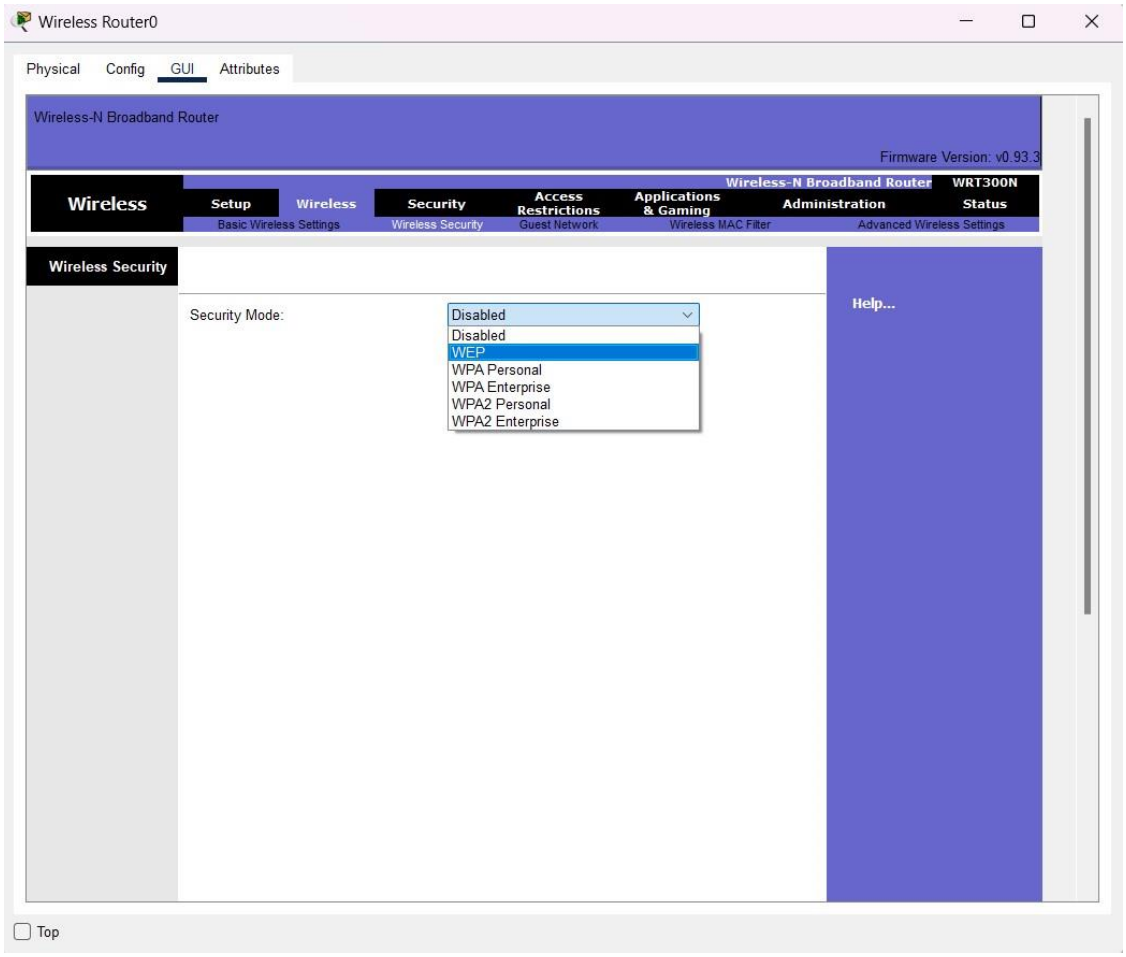
Router have been successfully done in CISCO PACKET TRACER.

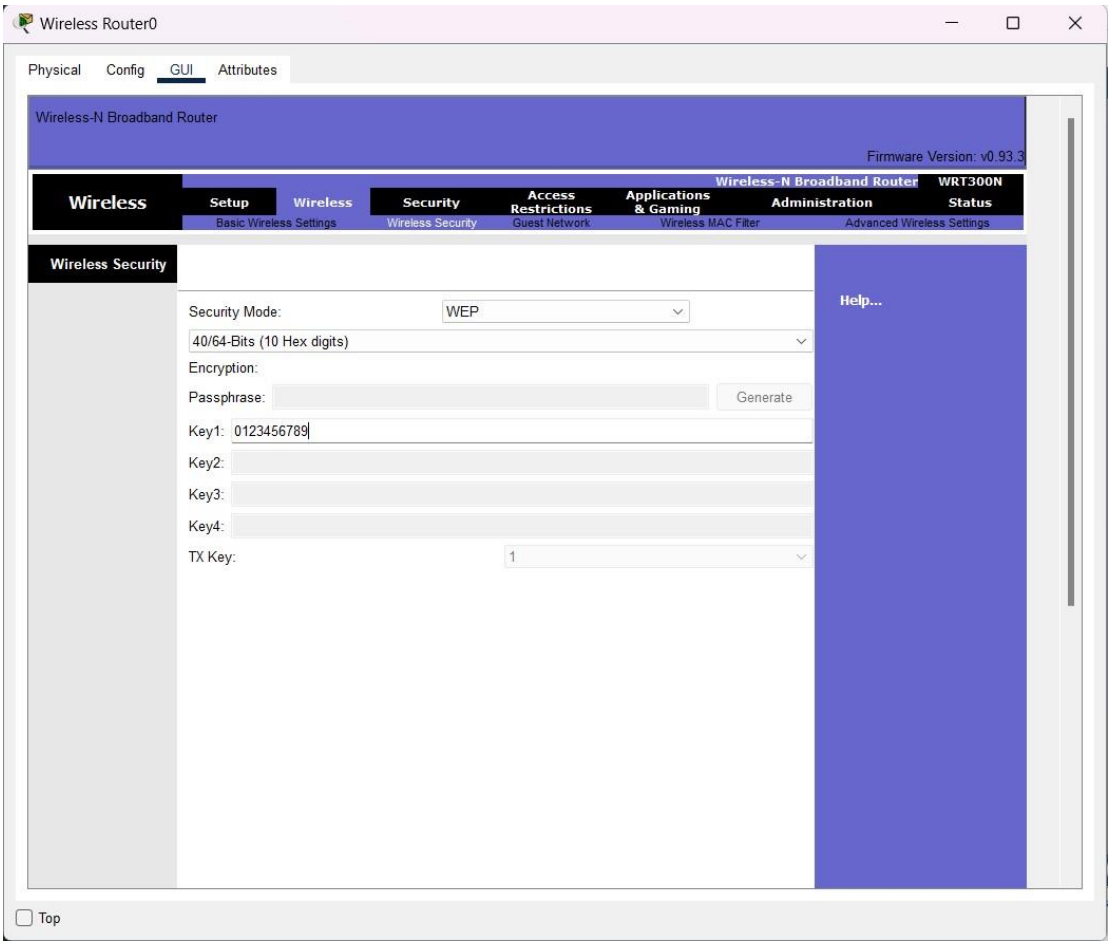
AIM: - b) Design and configure an internetwork using wireless router, DHCP server and internet cloud.

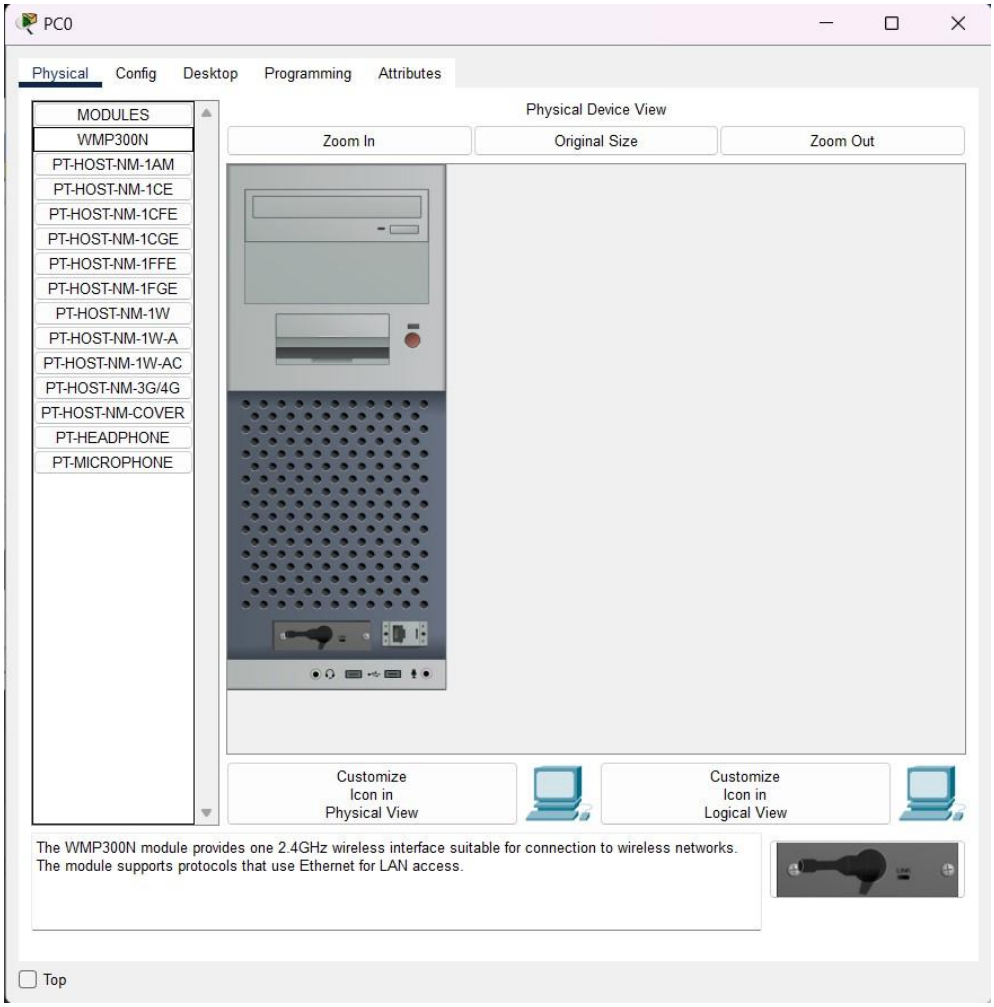
OUTPUT: -

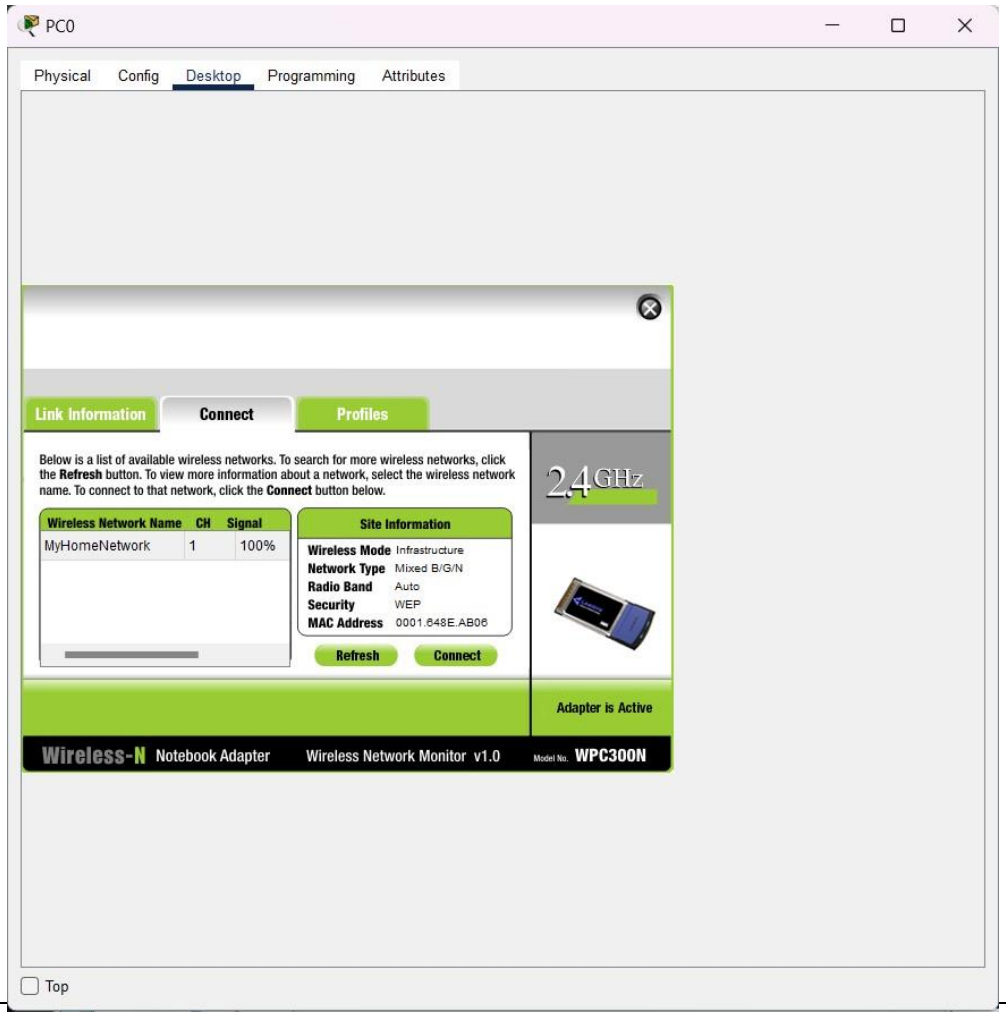

Wireless Router0
Physical
Config
GUI
Attributes
Wireless-N Broadband Router
Firmware Version: v0.93.3
Wireless-N Broadband Router WRT300N
Setup
Setup
Wireless
Security
Access Restrictions
Applications & Gaming
Administration
Status
Basic Setup
DDNS
MAC Address Clone
Advanced Routing
Internet Setup
Internet Connection type
Automatic Configuration - DHCP
Help...
Optional Settings (required by some internet service providers)
Host Name:
Domain Name:
MTU:
Size:
1500
Network Setup
Router IP
IP Address:
192
168
0
1
Subnet Mask:
255.255.255.0
DHCP Server Settings
DHCP Server:
Enabled
Disabled
DHCP Reservation
Start IP Address:
192.168.0.
100
Maximum number of Users:
50
IP Address Range:
192.168.0. 100 - 149
Client Lease Time:
0
minutes (0 means one day)
Static DNS 1:
Static DNS 2:
Static DNS 3:
WINS:
Top

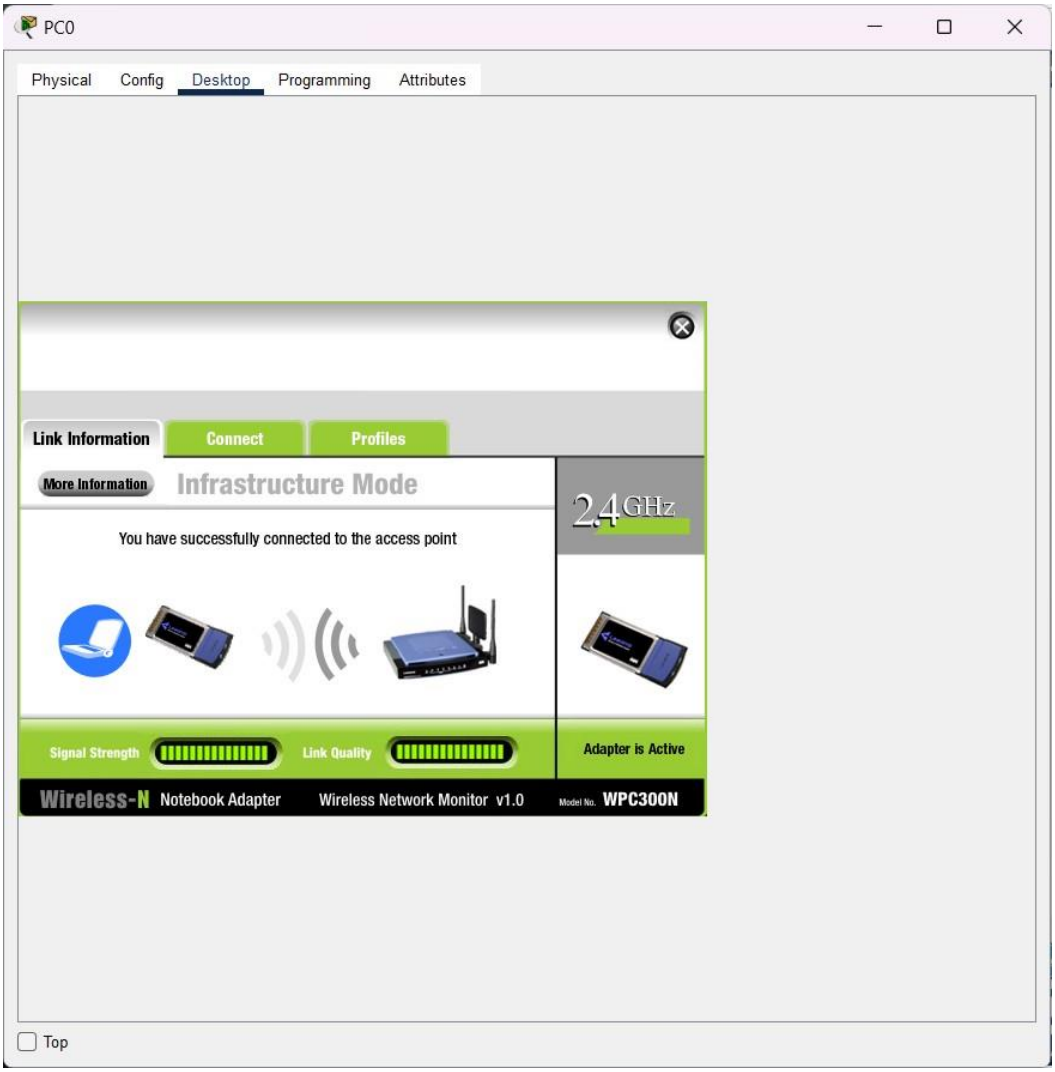

Wireless Router0
Physical
Config
GUI
Attributes
Wireless-N Broadband Router
Firmware Version: v0.93.3
Wireless-N Broadband Router WRT300N
Wireless
Setup
Wireless
Security
Access Restrictions
Applications & Gaming
Administration
Status
Basic Wireless Settings
Wireless Security
Guest Network
Wireless MAC Filter
Advanced Wireless Settings
Basic Wireless Settings
Help...
Network Mode:
Mixed
Network Name (SSID):
MyHomeNetwork
Radio Band:
Auto
Wide Channel:
Auto
Standard Channel:
1 - 2.412GHz
SSID Broadcast:
Enabled
Disabled
Top

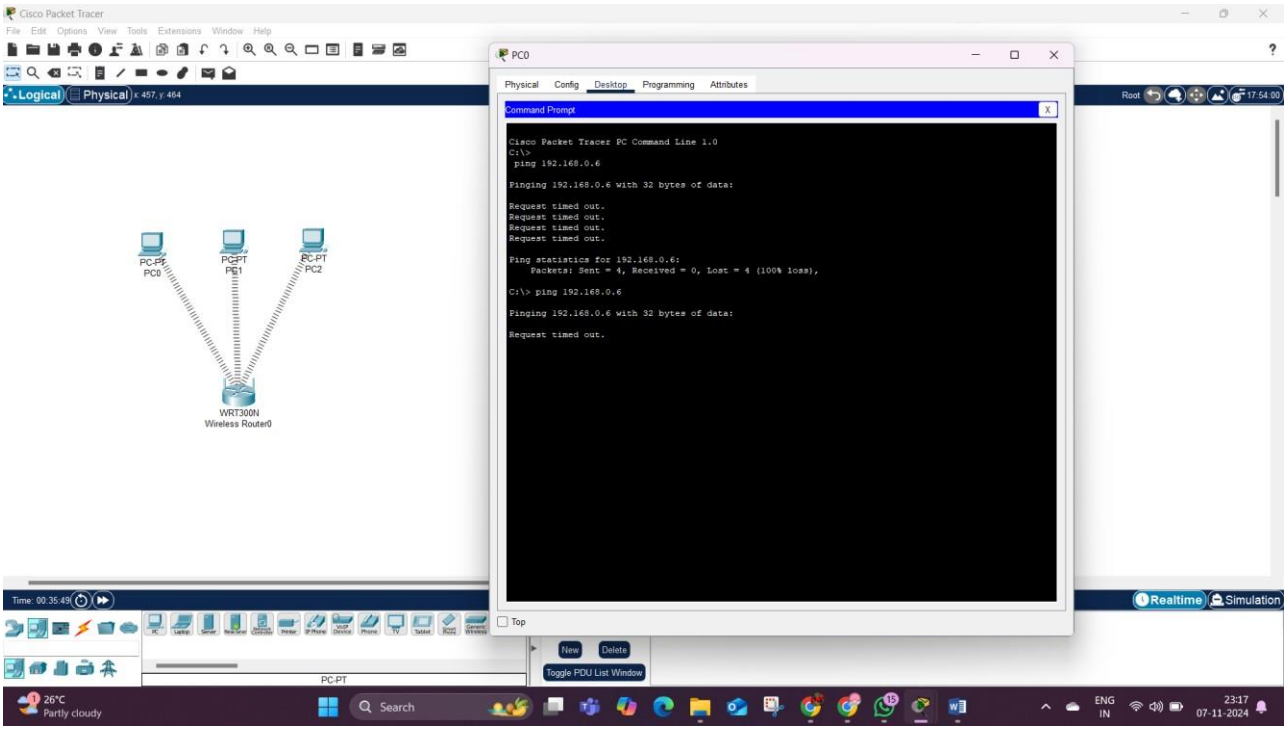

Wireless Router0
Physical
Config
GUI
Attributes
Wireless-N Broadband Router
Firmware Version: v0.93.3
Wireless-N Broadband Router WRT300N
Wireless
Setup
Wireless
Security
Access Restrictions
Applications & Gaming
Administration
Status
Basic Wireless Settings
Wireless Security
Guest Network
Wireless MAC Filter
Advanced Wireless Settings
Wireless Security
Security Mode:
Disabled
Disabled
WEP
WPA Personal
WPA Enterprise
WPA2 Personal
WPA2 Enterprise
Help...
Top


Wireless Router0
Physical
Config
GUI
Attributes
Wireless-N Broadband Router
Firmware Version: v0.93.3
Wireless-N Broadband Router WRT300N
Wireless
Setup
Wireless
Security
Access Restrictions
Applications & Gaming
Administration
Status
Basic Wireless Settings
Wireless Security
Guest Network
Wireless MAC Filter
Advanced Wireless Settings
Wireless Security
Security Mode:
WEP
40/64-Bits (10 Hex digits)
Encryption:
Passphrase:
Generate
Key1: 0123456789
Key2:
Key3:
Key4:
TX Key:
1
Help...
Top


PC0
Physical
Config
Desktop
Programming
Attributes
MODULES
WMP300N
PT-HOST-NM-1AM
PT-HOST-NM-1CE
PT-HOST-NM-1CFE
PT-HOST-NM-1CGE
PT-HOST-NM-1FFE
PT-HOST-NM-1FGE
PT-HOST-NM-1W
PT-HOST-NM-1W-A
PT-HOST-NM-1W-AC
PT-HOST-NM-3G/4G
PT-HOST-NM-COVER
PT-HEADPHONE
PT-MICROPHONE
Physical Device View
Zoom In
Original Size
Zoom Out
Customize Icon in Physical View
Customize Icon in Logical View
The WMP300N module provides one 2.4GHz wireless interface suitable for connection to wireless networks.
The module supports protocols that use Ethernet for LAN access.
Top


PC0
Physical
Config
Desktop
Programming
Attributes
Link Information
Connect
Profiles
Below is a list of available wireless networks. To search for more wireless networks, click the Refresh button. To view more information about a network, select the wireless network name. To connect to that network, click the Connect button below.
Wireless Network Name
CH
Signal
MyHomeNetwork
1
100%
Site Information
Wireless Mode Infrastructure
Network Type Mixed B/G/N
Radio Band Auto
Security WEP
MAC Address 0001.648E.AB06
Refresh
Connect
2.4GHz
Adapter is Active
Wireless-N Notebook Adapter
Wireless Network Monitor v1.0
Model No. WPC300N
Top


PC0
Physical
Config
Desktop
Programming
Attributes
Link Information
Connect
Profiles
More Information
Infrastructure Mode
2.4GHz
You have successfully connected to the access point
Signal Strength
Link Quality
Adapter is Active
Wireless-N Notebook Adapter
Wireless Network Monitor v1.0
Model No. WPC300N
Top


Cisco Packet Tracer
PC0
Physical
Config
Desktop
Programming
Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>
ping 192.168.0.6
Pinging 192.168.0.6 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.0.6:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\> ping 192.168.0.6
Pinging 192.168.0.6 with 32 bytes of data:
Request timed out.
PC-PT PC0
PC-PT PC1
PC-PT PC2
WRT300N Wireless Router0
Logical
Physical
Realtime
Simulation
Top
New
Delete
Toggle PDU List Window
Search

RESULT: -

Wireless Router have been successfully done in CISCO PACKET TRACER.