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Batch : D, T.E. Comps
Subject : DCCN

EXPERIMENT NO. 4

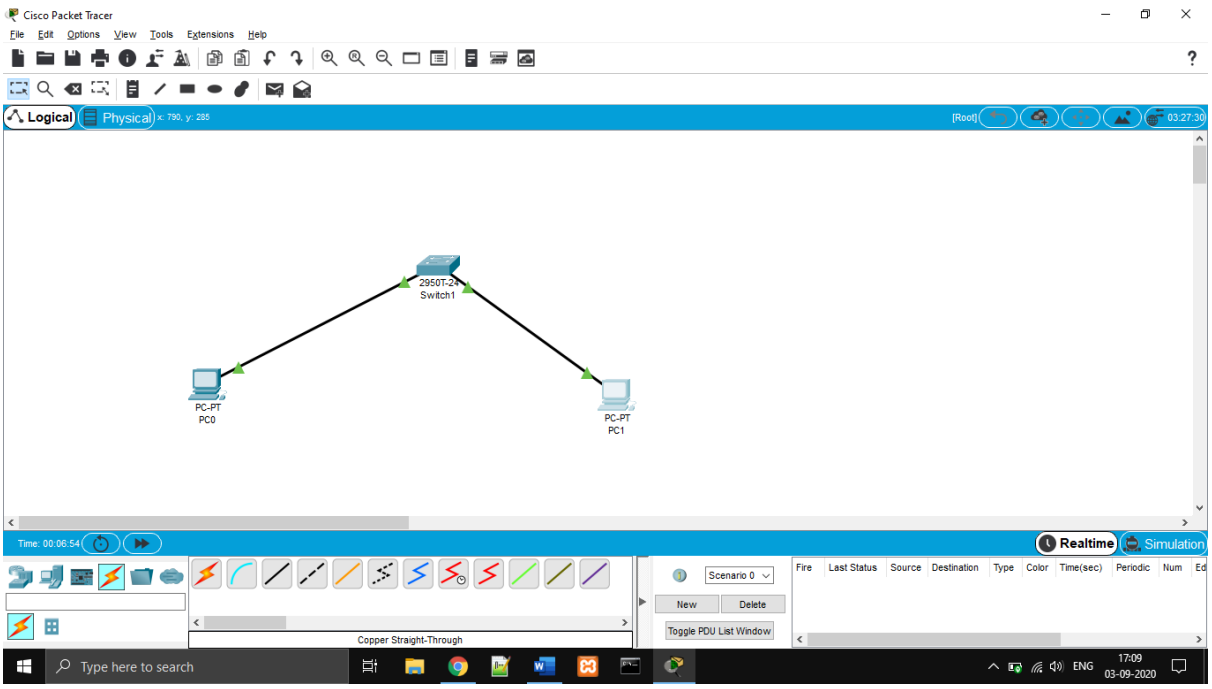
Aim : Prototype a network using Packet Tracer

Background
A client has requested that you set up a simple network with two PCs connected to a switch. Verify that the hardware, along with the given configurations, meet the requirements of the client.

Step 1: Set up the network topology

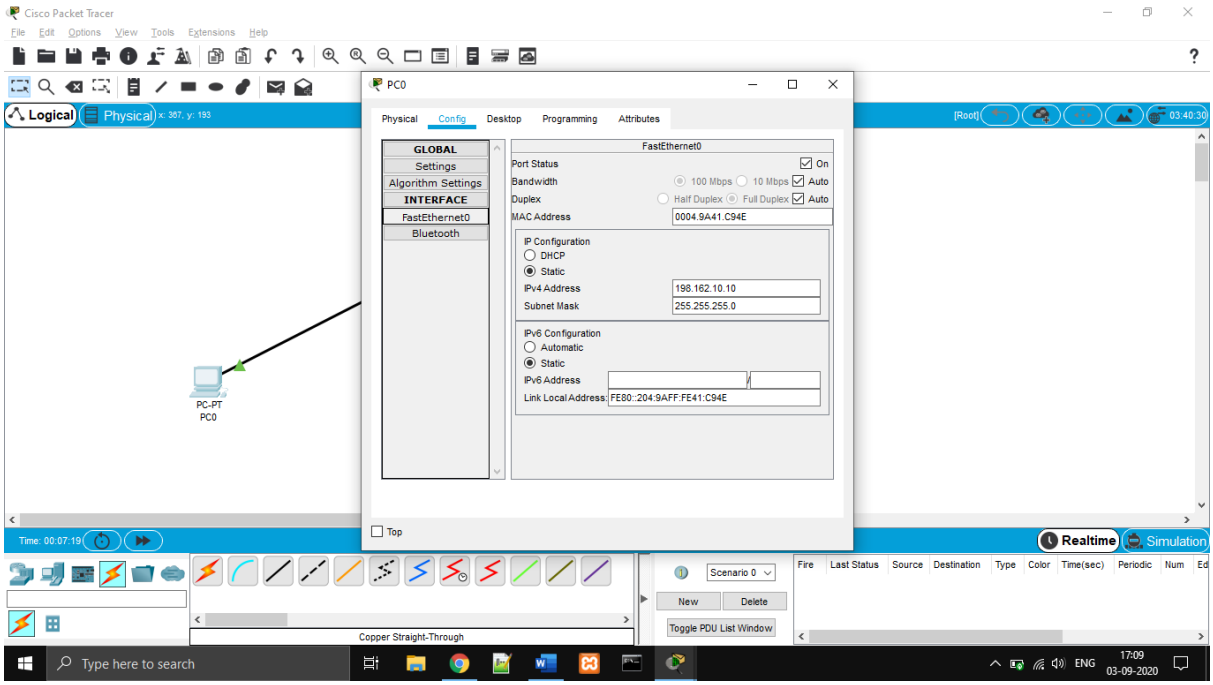
a) Add two PCs and a Cisco 2950T switch

b) Using straight-through cables, connect **PC0** to interface **Fa0/1** on **Switch0** and **PC1** to interface **Fa0/2** on **Switch0**.



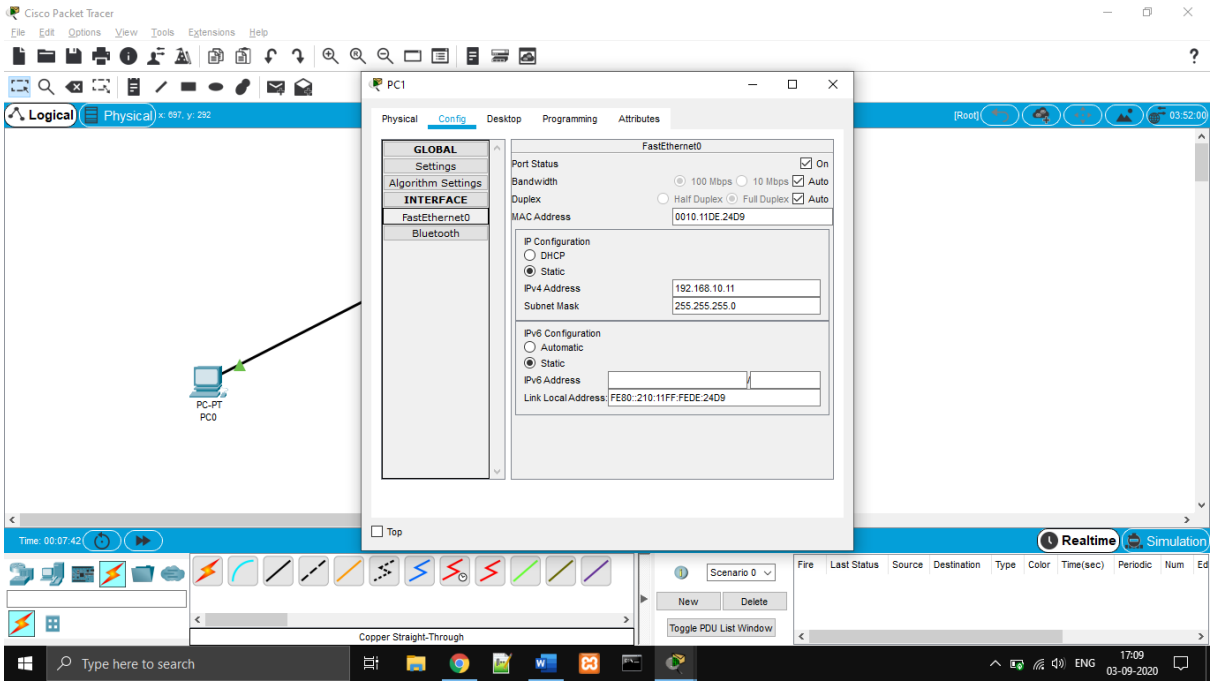
c) Configure PC0 using the **Config** tab in the PC0 configuration window:

a. IP address: 192.168.10.10
b. Subnet Mask 255.255.255.0



d) Configure PC1 using the **Config** tab in the PC1 configuration window

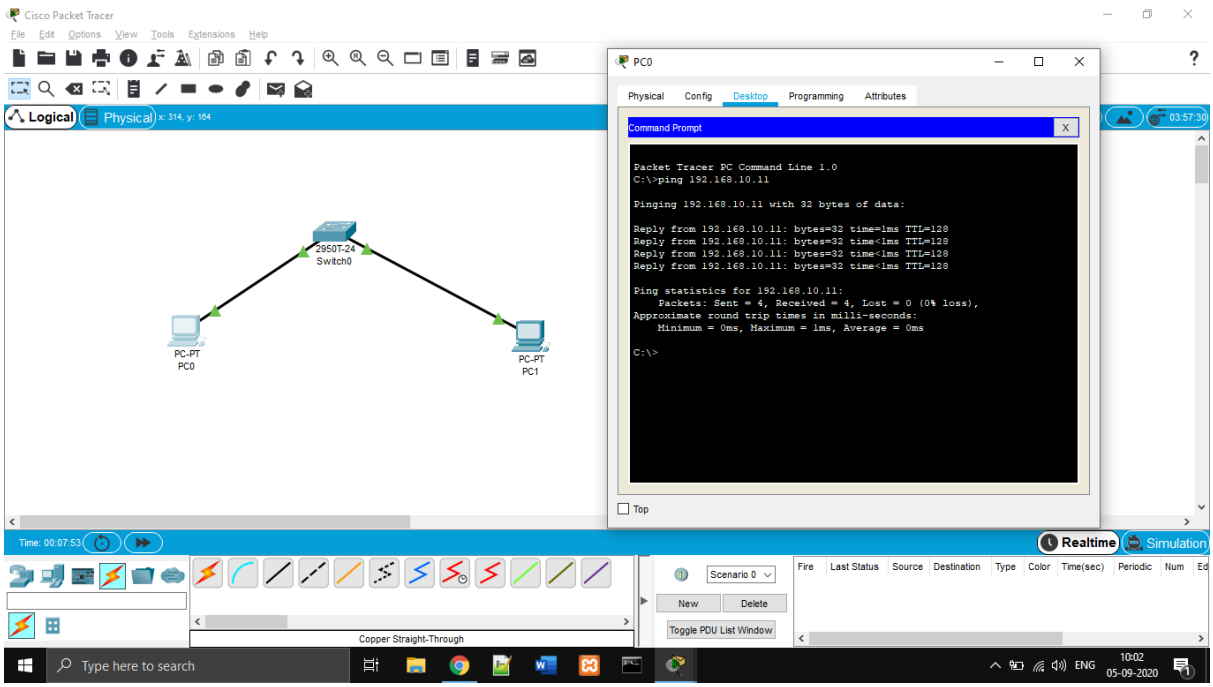
a. IP address: 192.168.10.11
b. Subnet Mask 255.255.255.0

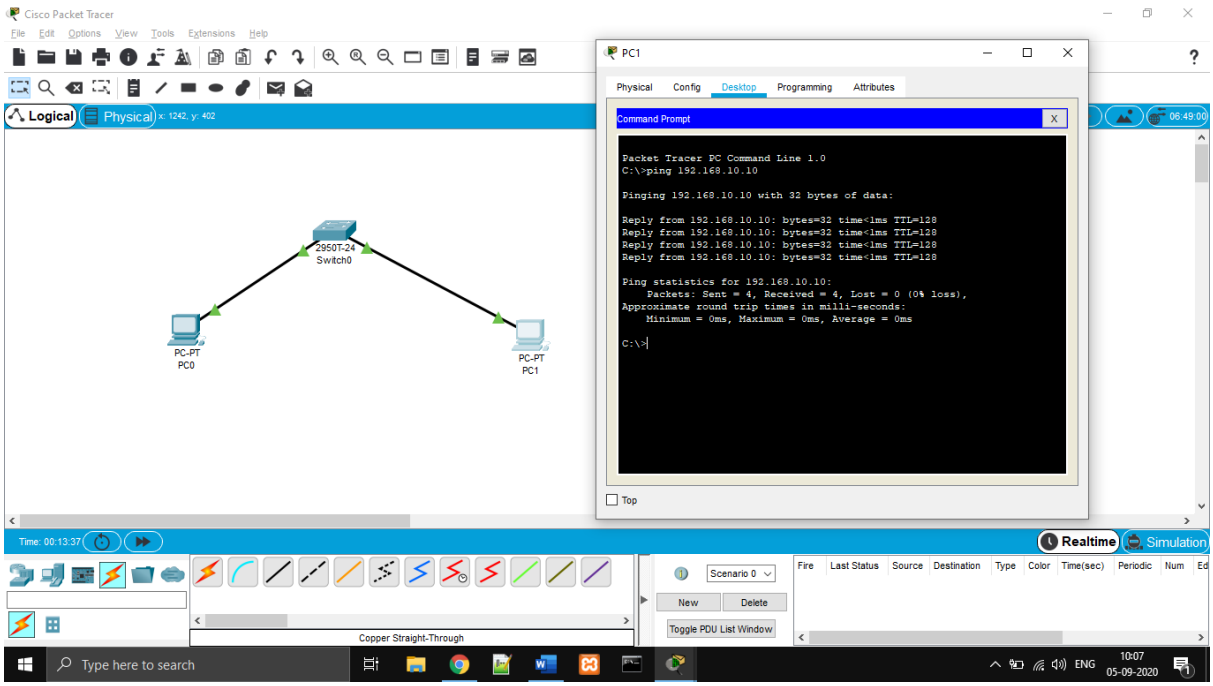


Step 2: Test connectivity from PC0 to PC1

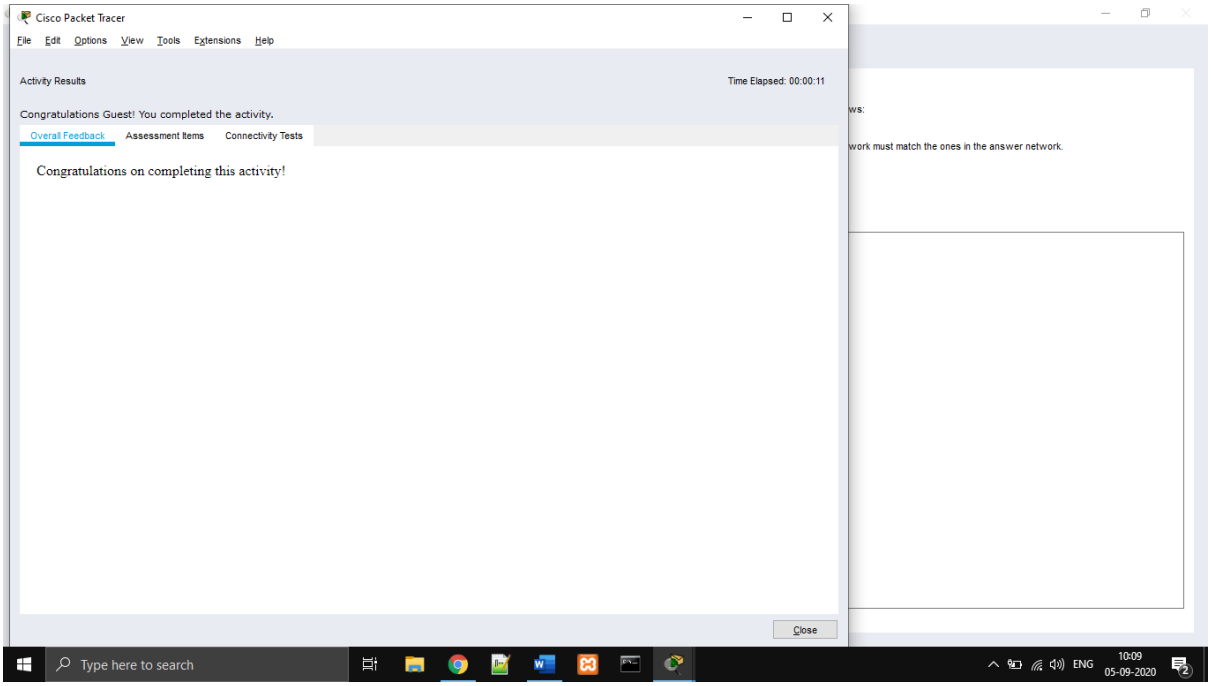
a) Use the **ping** command to test connectivity.
   a. Click PC0.
   b. Choose the **Desktop** tab.
   c. Choose **Command Prompt**.
   d. Type: **ping 192.168.10.11** and press *enter*.

b) A successful **ping** indicates the network was configured correctly and the prototype validates the hardware and software configurations. A successful ping should resemble the below output:



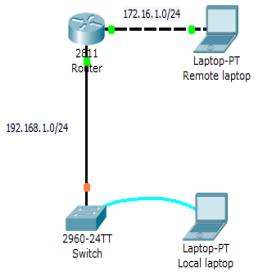


c) Close the configuration window.
d) Click the **Check Results** button at the bottom of the instruction window to check your work..

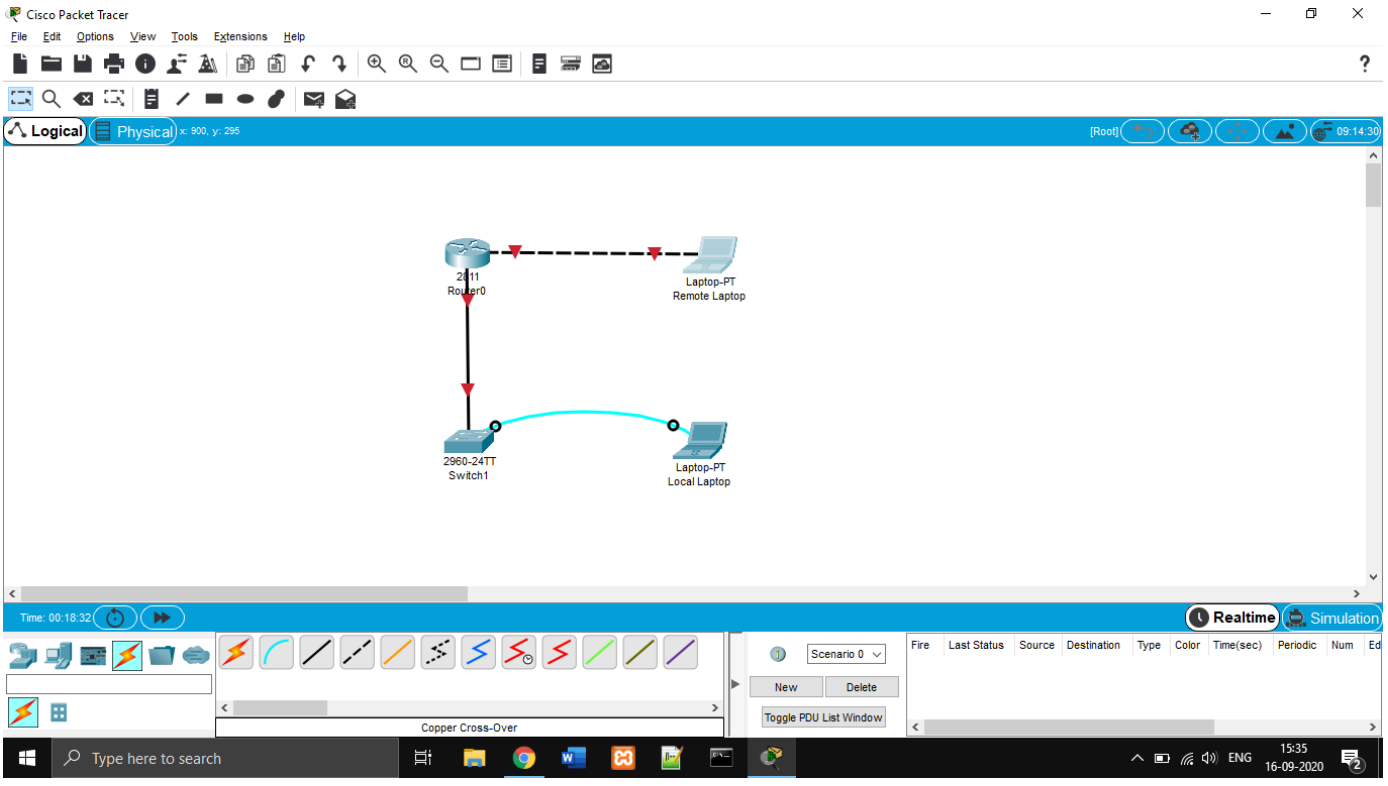


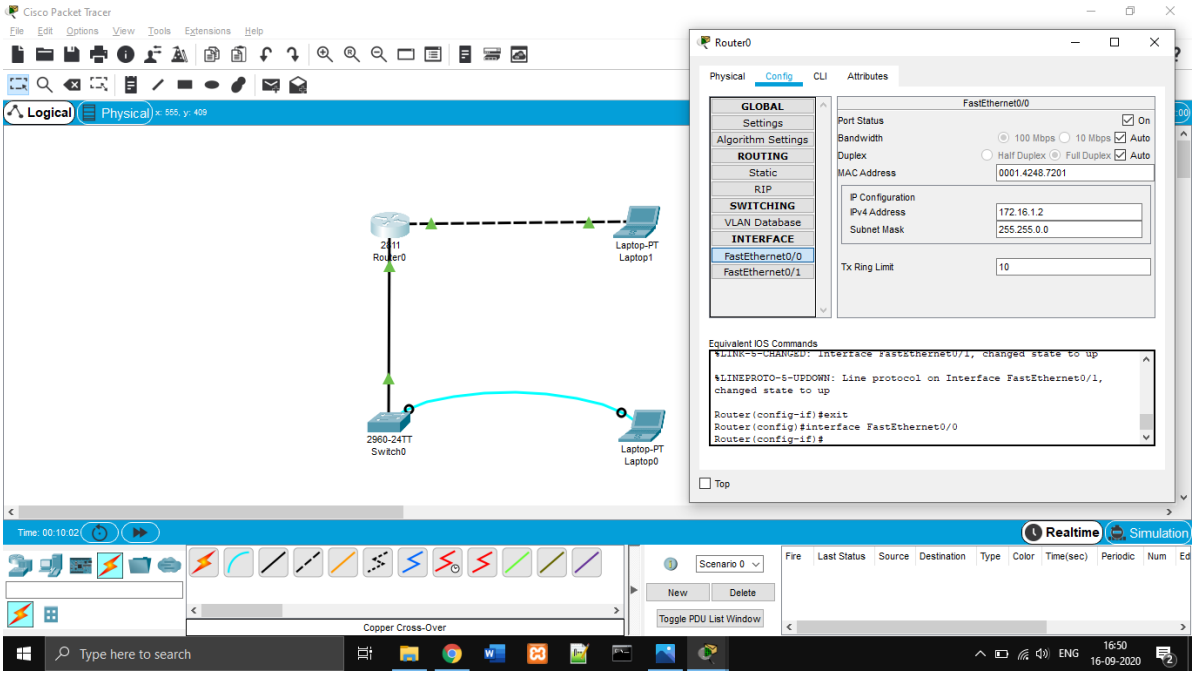
CEL51, DCCN, Monsoon 2020
Lab 4.1: Basic configuration - hostname, motd banner, passwd etc

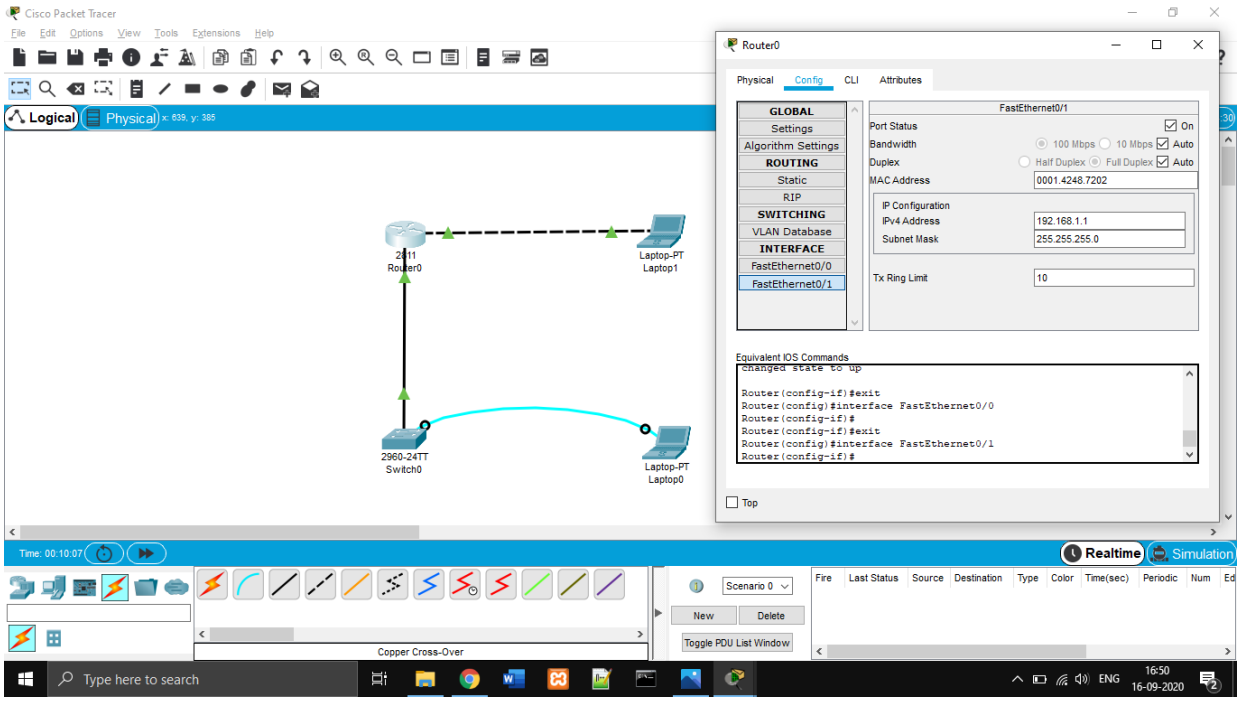
Objective:
This lab will test your ability to configure basic settings such as hostname, motd banner, encrypted passwords, and terminal options on a Packet Tracer 6.2 simulated Cisco Catalyst switch.

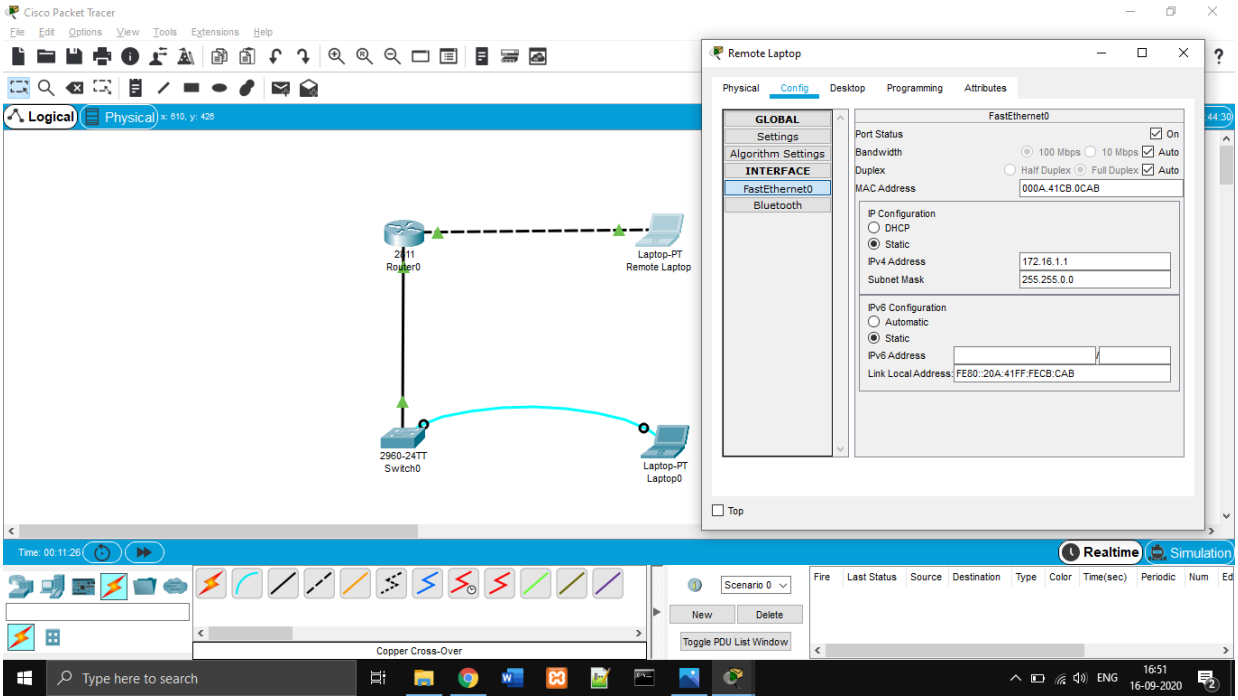


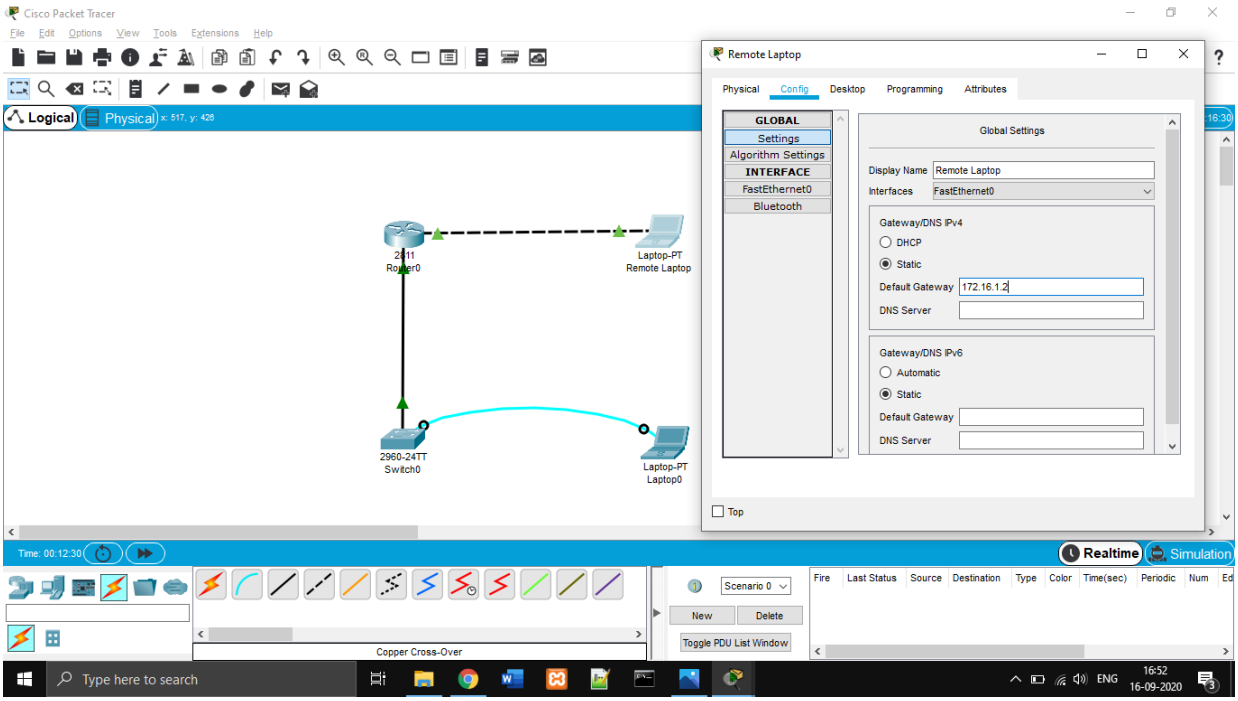
1. Use the local laptop connect to the switch console.



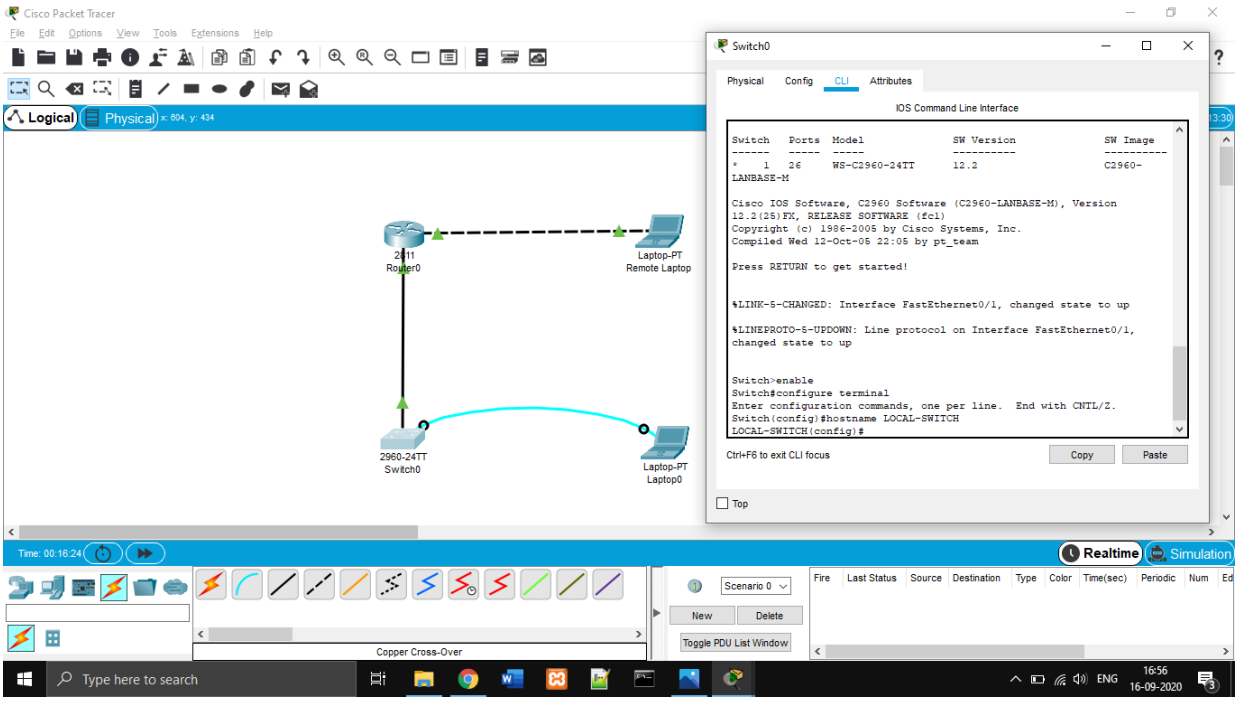

Cisco Packet Tracer
File Edit Options View Tools Extensions Help
Logical Physical x: 555, y: 409
2811 Router0
Laptop-PT Laptop1
2960-24TT Switch0
Laptop-PT Laptop0
Router0
Physical Config CLI Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/0
FastEthernet0/1
FastEthernet0/0
Port Status On
Bandwidth 100 Mbps 10 Mbps Auto
Duplex Half Duplex Full Duplex Auto
MAC Address 0001.4248.7201
IP Configuration
IPv4 Address 172.16.1.2
Subnet Mask 255.255.0.0
Tx Ring Limit 10
Equivalent IOS Commands
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
Top
Time: 00:10:02
Realtime Simulation
Scenario 0
New Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Ed
Copper Cross-Over
Type here to search
ENG 16:50 16-09-2020


Cisco Packet Tracer
File Edit Options View Tools Extensions Help
Logical Physical x: 639, y: 385
2811 Router0
Laptop-PT Laptop1
2960-24TT Switch0
Laptop-PT Laptop0
Router0
Physical Config CLI Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/0
FastEthernet0/1
FastEthernet0/1
Port Status On
Bandwidth 100 Mbps 10 Mbps Auto
Duplex Half Duplex Full Duplex Auto
MAC Address 0001.4248.7202
IP Configuration
IPv4 Address 192.168.1.1
Subnet Mask 255.255.255.0
Tx Ring Limit 10
Equivalent IOS Commands
changed state to up
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#
Top
Time: 00:10:07
Realtime Simulation
Scenario 0
New Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Ed
Copper Cross-Over
Type here to search
ENG 16:50 16-09-2020

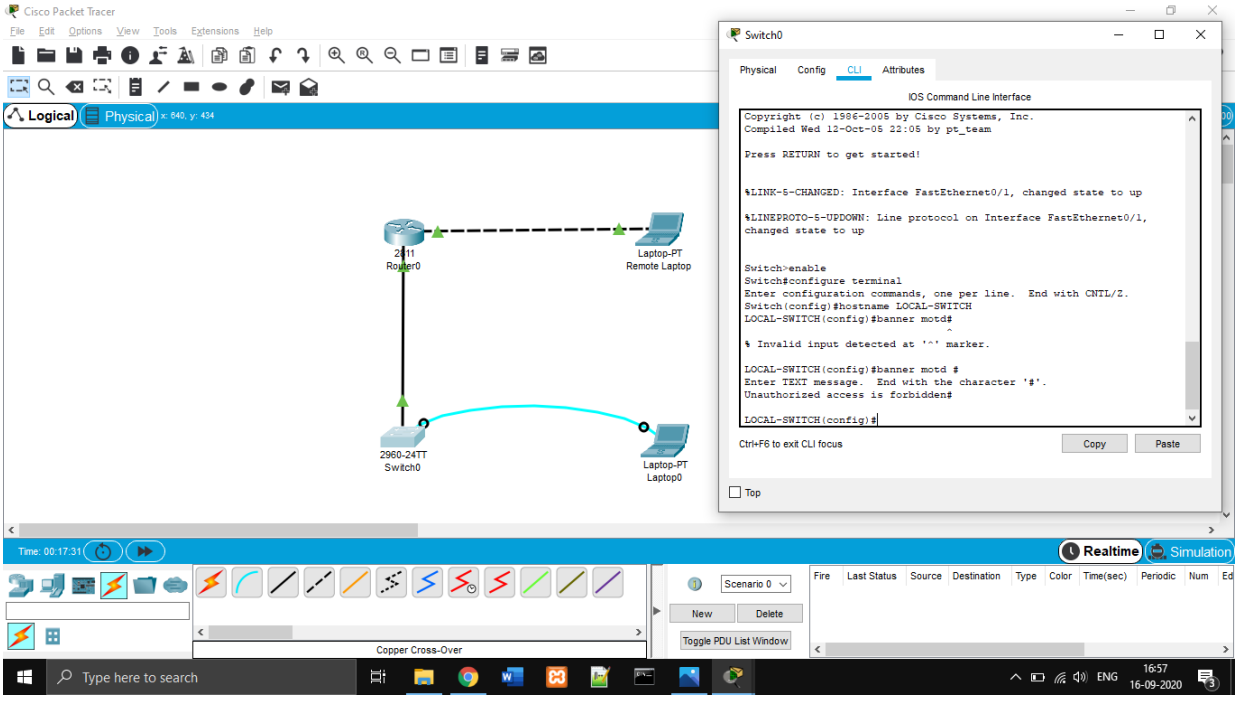

Cisco Packet Tracer
File Edit Options View Tools Extensions Help
Logical Physical x: 810, y: 426
2811 Router0
Laptop-PT Remote Laptop
2960-24TT Switch0
Laptop-PT Laptop0
Remote Laptop
Physical Config Desktop Programming Attributes
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth
FastEthernet0
Port Status On
Bandwidth 100 Mbps 10 Mbps Auto
Duplex Half Duplex Full Duplex Auto
MAC Address 000A.41CB.0CAB
IP Configuration
DHCP
Static
IPv4 Address 172.16.1.1
Subnet Mask 255.255.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address FE80::20A:41FF:FECB:CAB
Top
Time: 00:11:26
Realtime Simulation
Scenario 0
New Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Ed
Copper Cross-Over
Type here to search
ENG 16:51 16-09-2020


Cisco Packet Tracer
File Edit Options View Tools Extensions Help
Logical Physical x: 517, y: 426
2811 Router0
Laptop-PT Remote Laptop
2960-24TT Switch0
Laptop-PT Laptop0
Remote Laptop
Physical Config Desktop Programming Attributes
GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth
Global Settings
Display Name Remote Laptop
Interfaces FastEthernet0
Gateway/DNS IPv4
DHCP
Static
Default Gateway 172.16.1.2
DNS Server
Gateway/DNS IPv6
Automatic
Static
Default Gateway
DNS Server
Top
Time: 00:12:30
Realtime Simulation
Scenario 0
New Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Ed
Copper Cross-Over
Type here to search
ENG 16:52 16-09-2020

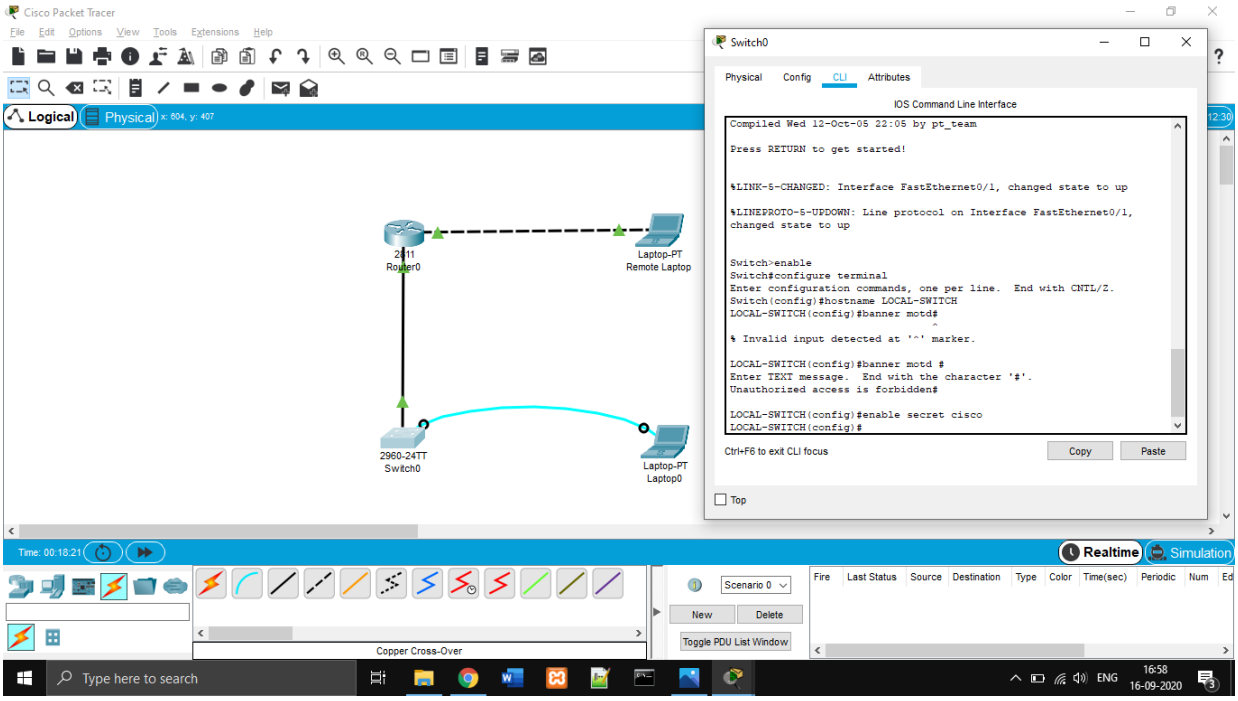
2. Configure Switch hostname as LOCAL-SWITCH



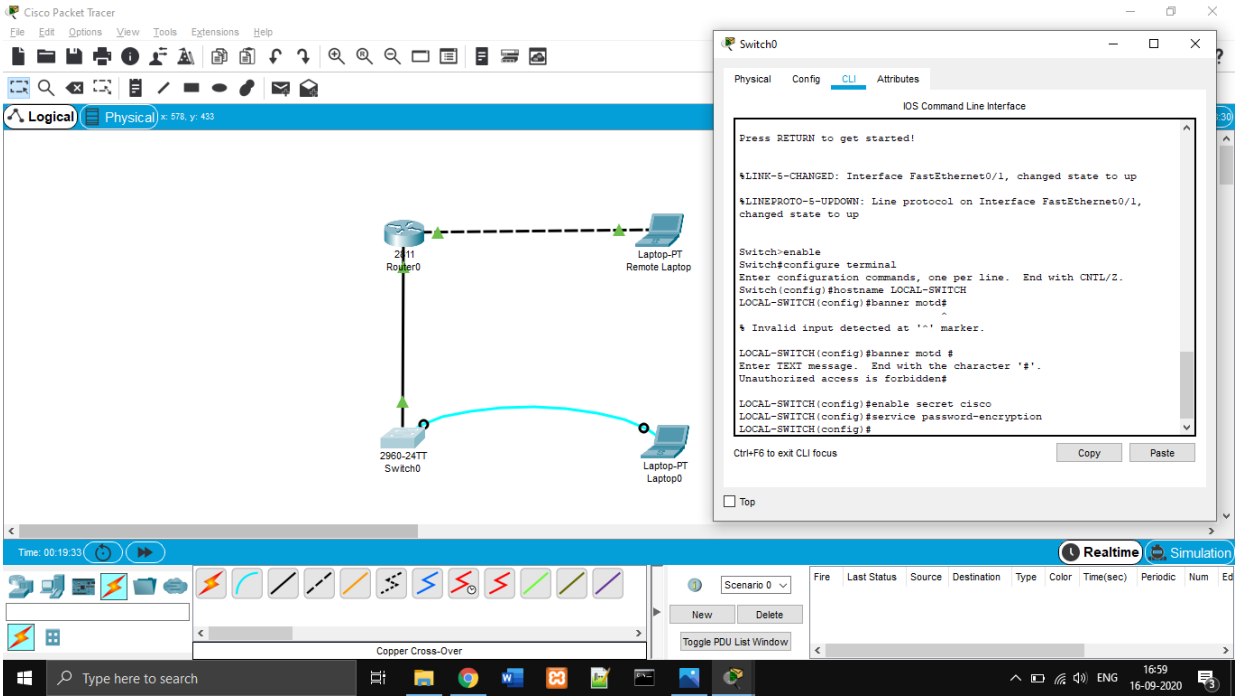
3. Configure the message of the day as "Unauthorized access is forbidden"



4. Configure the password for privileged mode access as "cisco". The password must be md5 encrypted



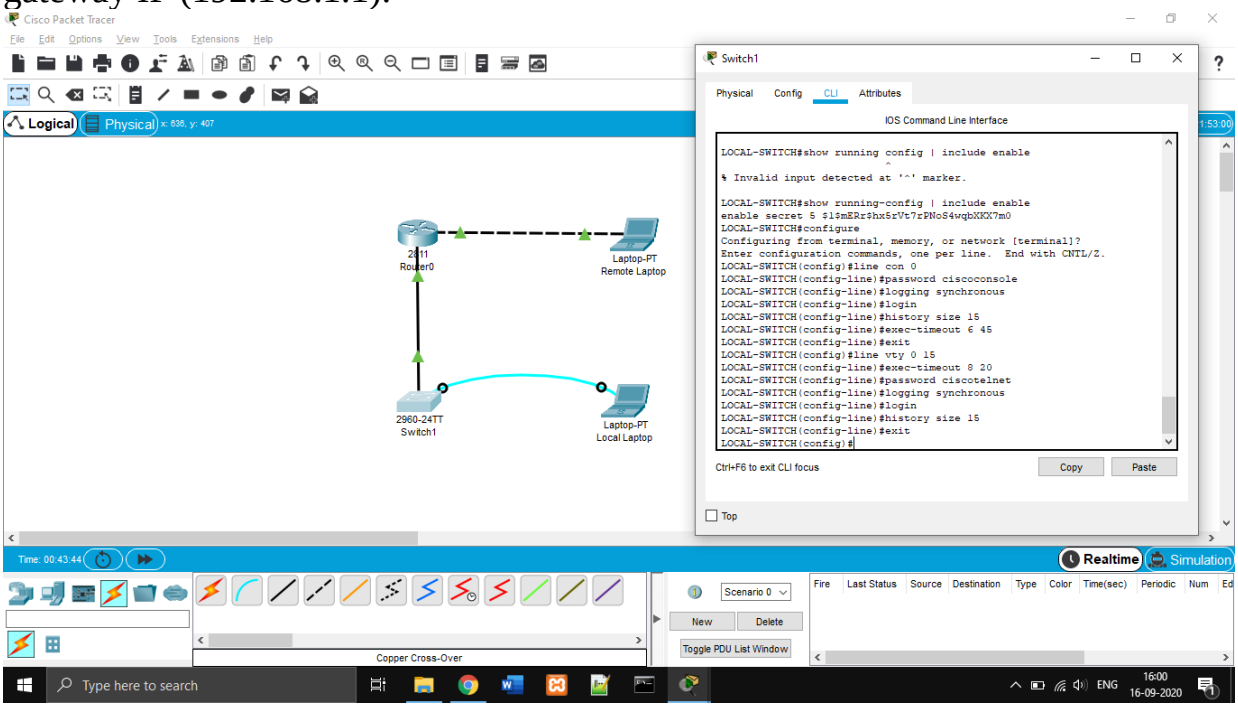
5. Configure password encryption on the switch using the global configuration command



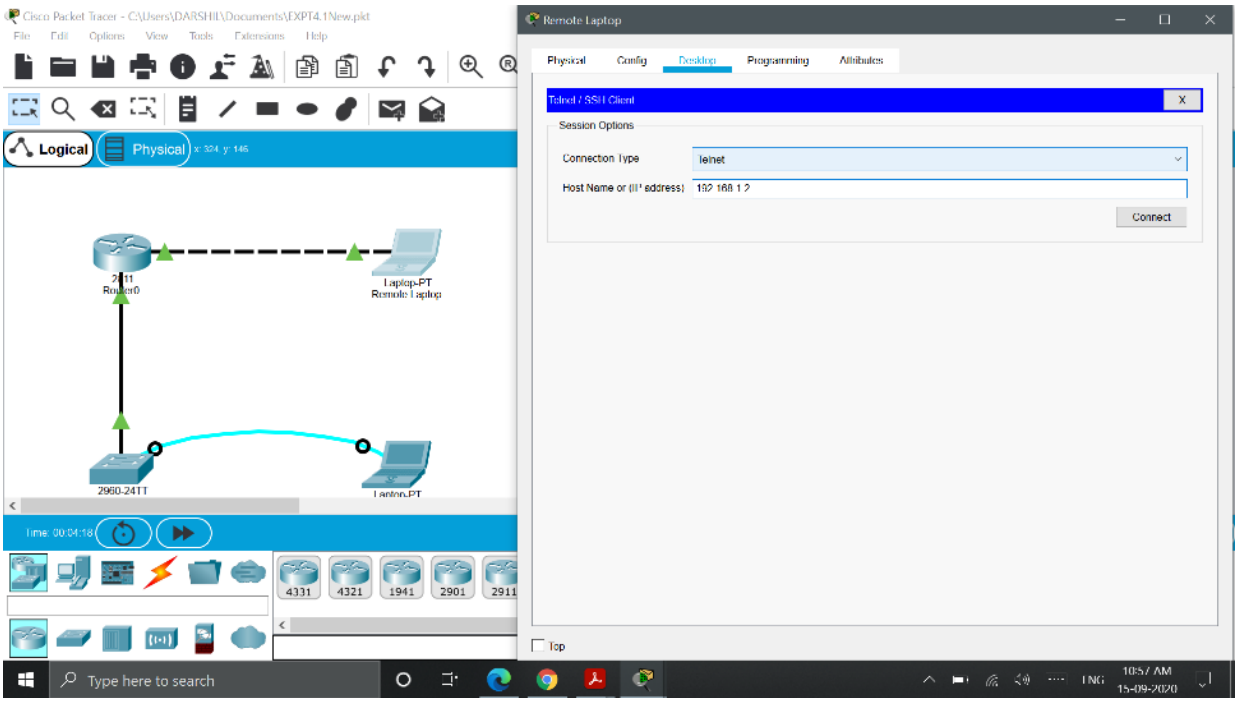
6. Configure CONSOLE access with the following settings:
- Login enabled
- Password : whatever you like
- History size : 15 commands
- Timeout : 6'45"
- Synchronous logging

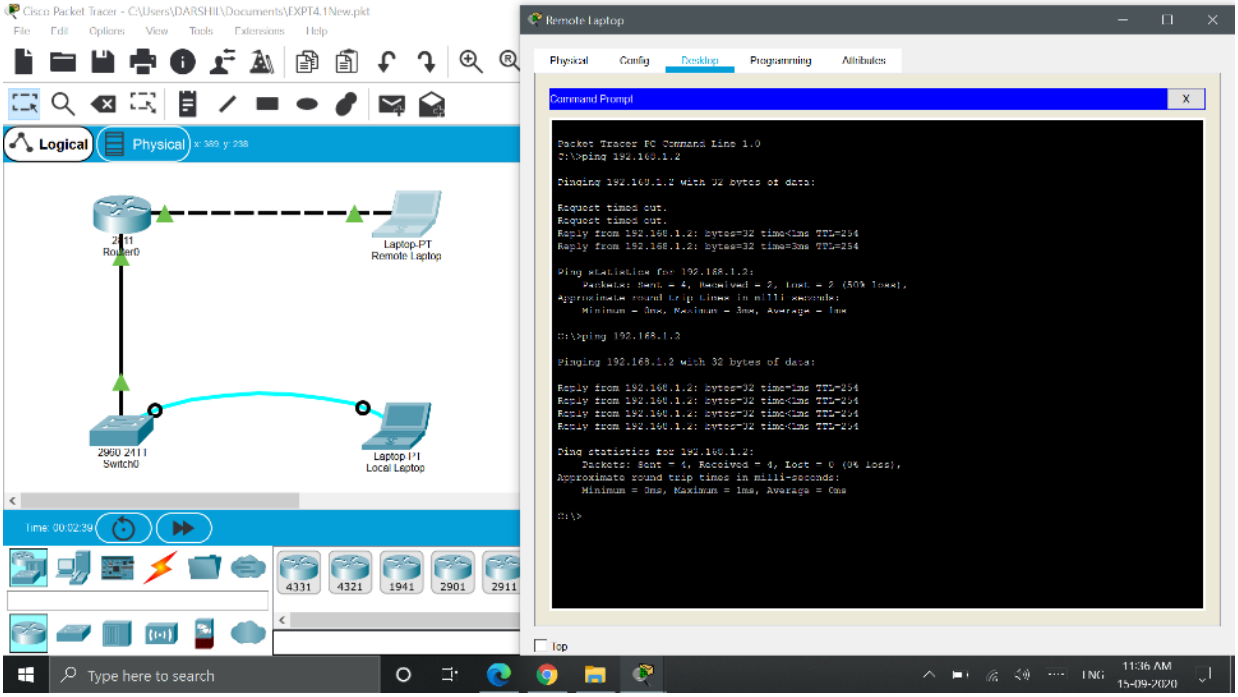
6. Configure TELNET access with the following settings :
- Login enabled
- Password : whatever you like
- History size : 15 commands
- Timeout : 8'20"
- Synchronous logging

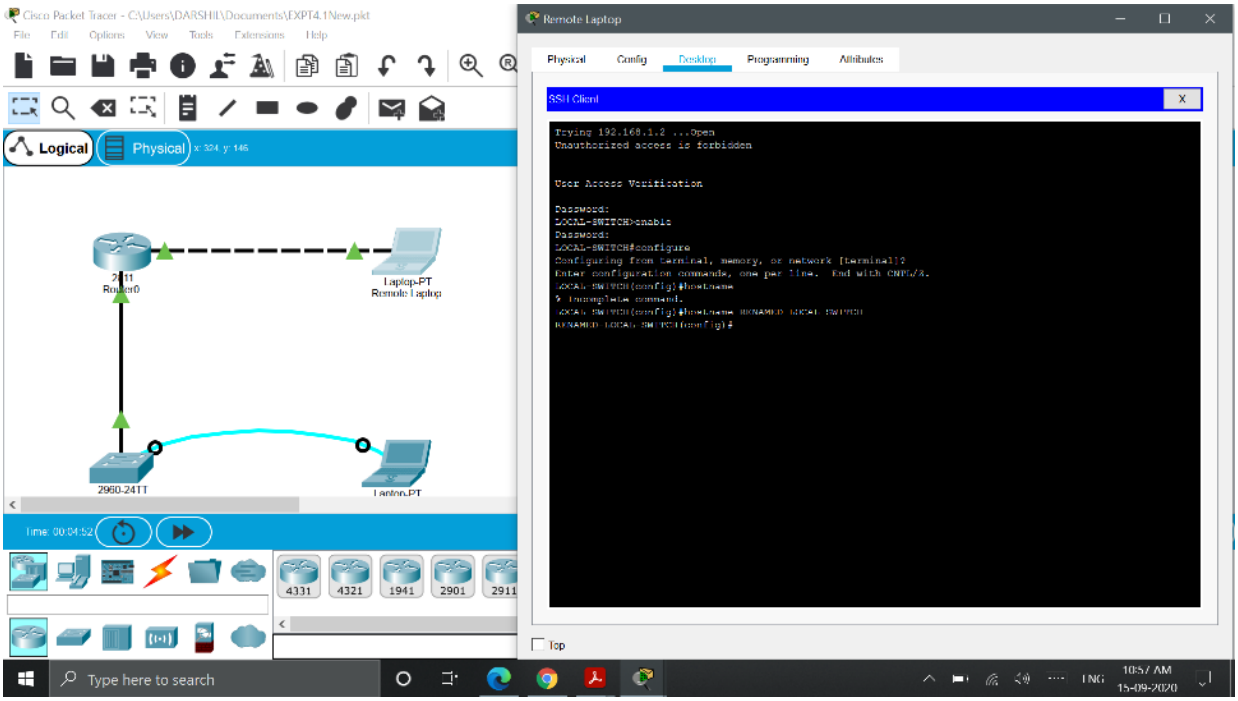
7. Configure the IP address of the switch as 192.168.1.2/24 and it's default gateway IP (192.168.1.1).

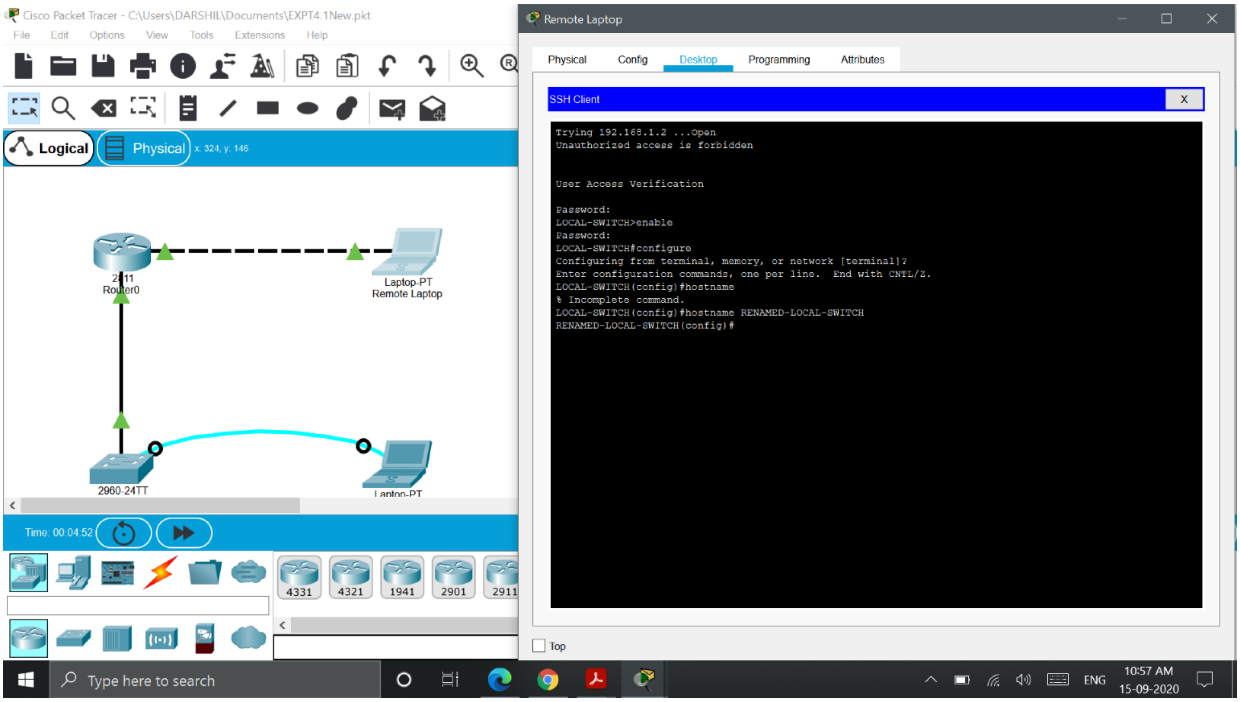


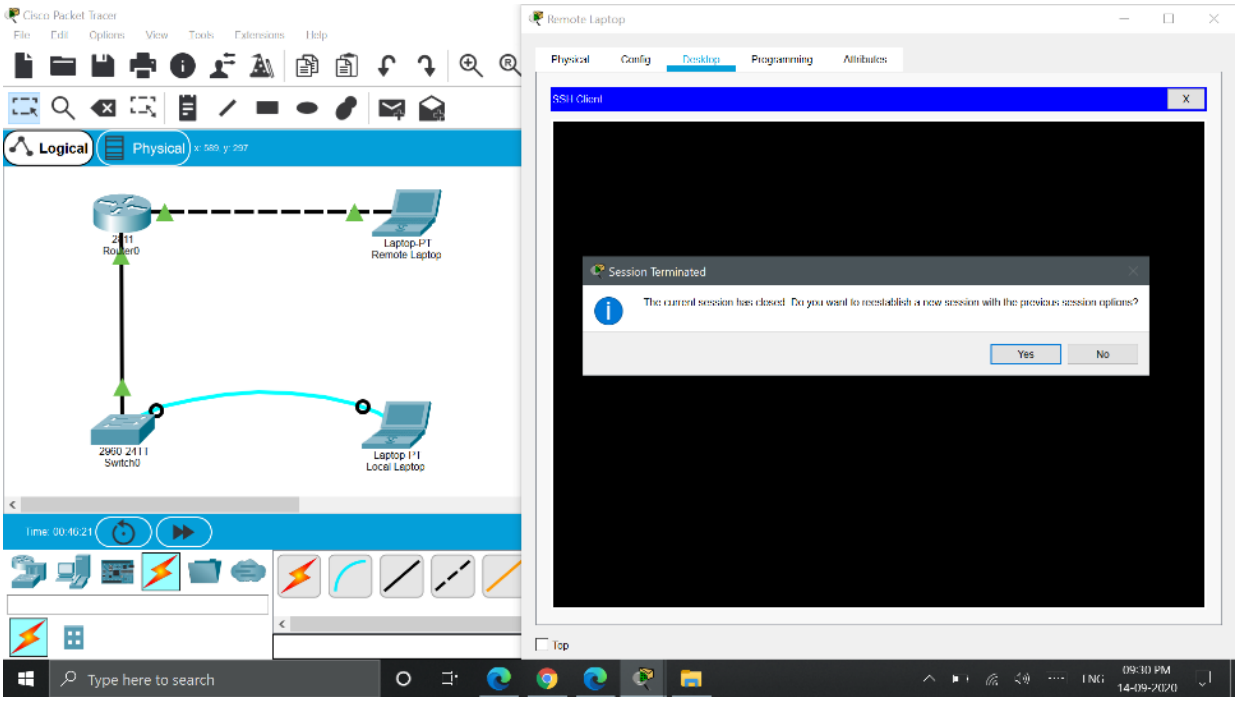
8. Test telnet connectivity from the Remote Laptop using the telnet client.






Cisco Packet Tracer - C:\Users\DARSHIL\Documents\EXPT4.1New.pkt
File Edit Options View Tools Extensions Help
Logical
Physical
Router0
Laptop-PT
Remote Laptop
2960-24TT
Laptop-PT
Time: 00:04:52
4331
4321
1941
2901
2911
Remote Laptop
Physical Config Desktop Programming Attributes
SSH Client
Trying 192.168.1.2 ...Open
Unauthorized access is forbidden
User Access Verification
Password:
LOCAL-SWITCH>enable
Password:
LOCAL-SWITCH#configure
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
LOCAL-SWITCH(config)#hostname
% Incomplete command.
LOCAL-SWITCH(config)#hostname RENAMED-LOCAL-SWITCH
RENAMED-LOCAL-SWITCH(config)#
Top
Type here to search
ENG
10:57 AM
15-09-2020


Cisco Packet Tracer - C:\Users\DARSHIL\Documents\EXPT4.1New.pkt
File Edit Options View Tools Extensions Help
Logical
Physical
Router0
Laptop-PT
Remote Laptop
2960-24TT
Laptop-PT
Time: 00:04:52
4331
4321
1941
2901
2911
Remote Laptop
Physical Config Desktop Programming Attributes
SSH Client
Trying 192.168.1.2 ...Open
Unauthorized access is forbidden
User Access Verification
Password:
LOCAL-SWITCH>enable
Password:
LOCAL-SWITCH#configure
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
LOCAL-SWITCH(config)#hostname
% Incomplete command.
LOCAL-SWITCH(config)#hostname RENAMED-LOCAL-SWITCH
RENAMED-LOCAL-SWITCH(config)#
Top
Type here to search
ENG
10:57 AM
15-09-2020


Cisco Packet Tracer
File Edit Options View Tools Extensions Help
Logical
Physical
Router0
Laptop-PT
Remote Laptop
2960 24TT
Switch0
Laptop-PT
Local Laptop
Time: 00:16:21
Remote Laptop
Physical Config Desktop Programming Attributes
SSH Client
Session Terminated
The current session has closed. Do you want to reestablish a new session with the previous session options?
Yes
No
Top
Type here to search
ENG
09:30 PM
14-09-2020