ABHIR SINGH

2018130008

BATCH-A

TE COMPS

DCCN

LAB-4

Objective:

Prototype a network using Packet Tracer

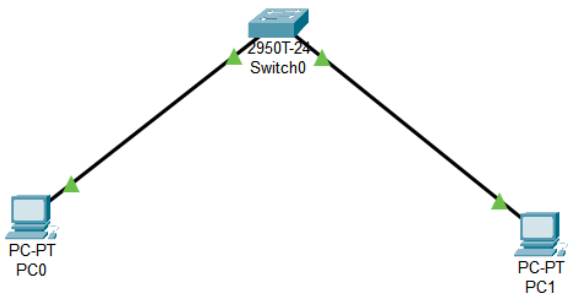
Background

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

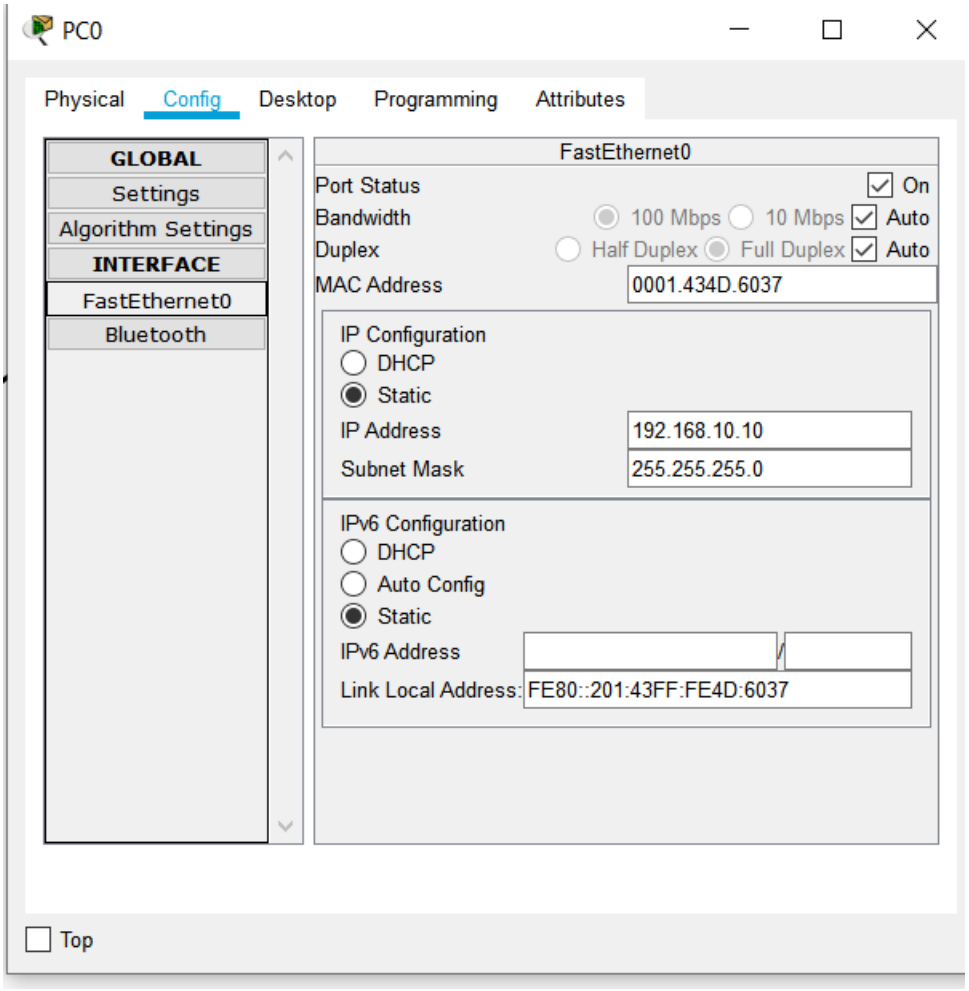
b) Using straight-through cables, connect PC0 to interface **Fa0/1** on Switch0 and PC1 to interface **Fa0/2** on Switch0.



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

a. IP address: 192.168.10.10

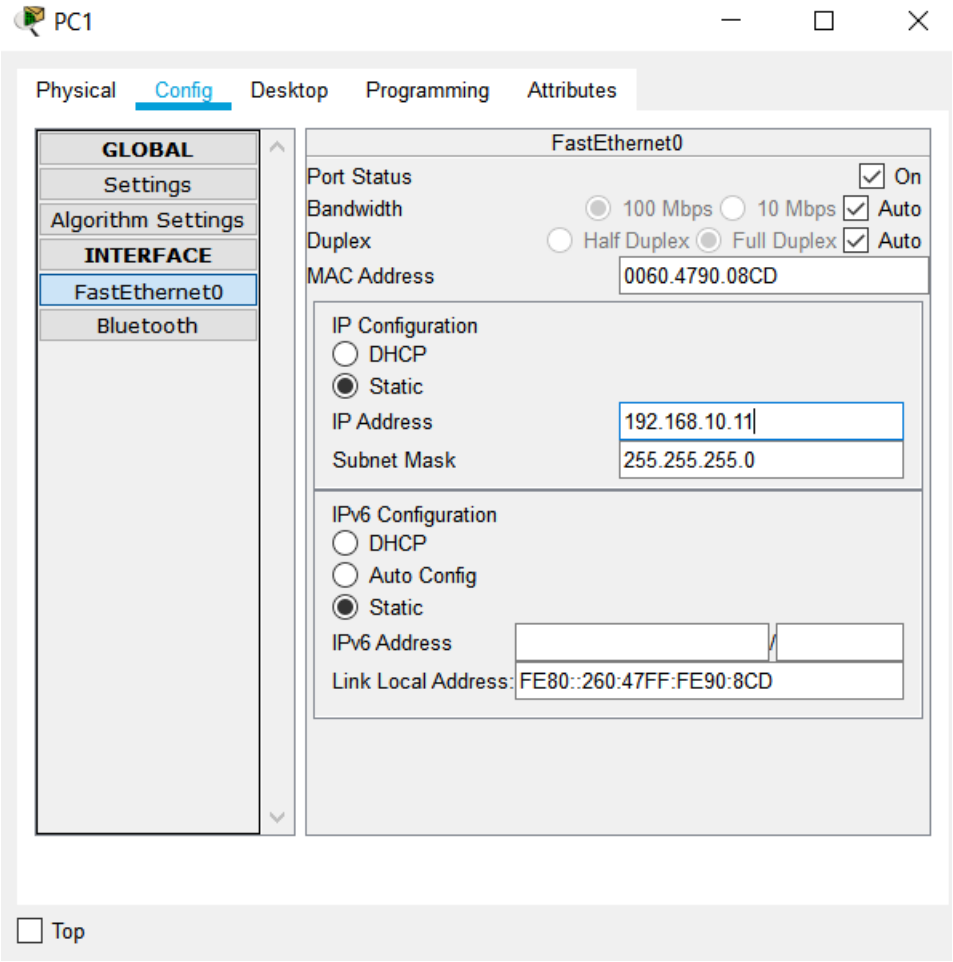
b. Subnet Mask 255.255.255.0



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

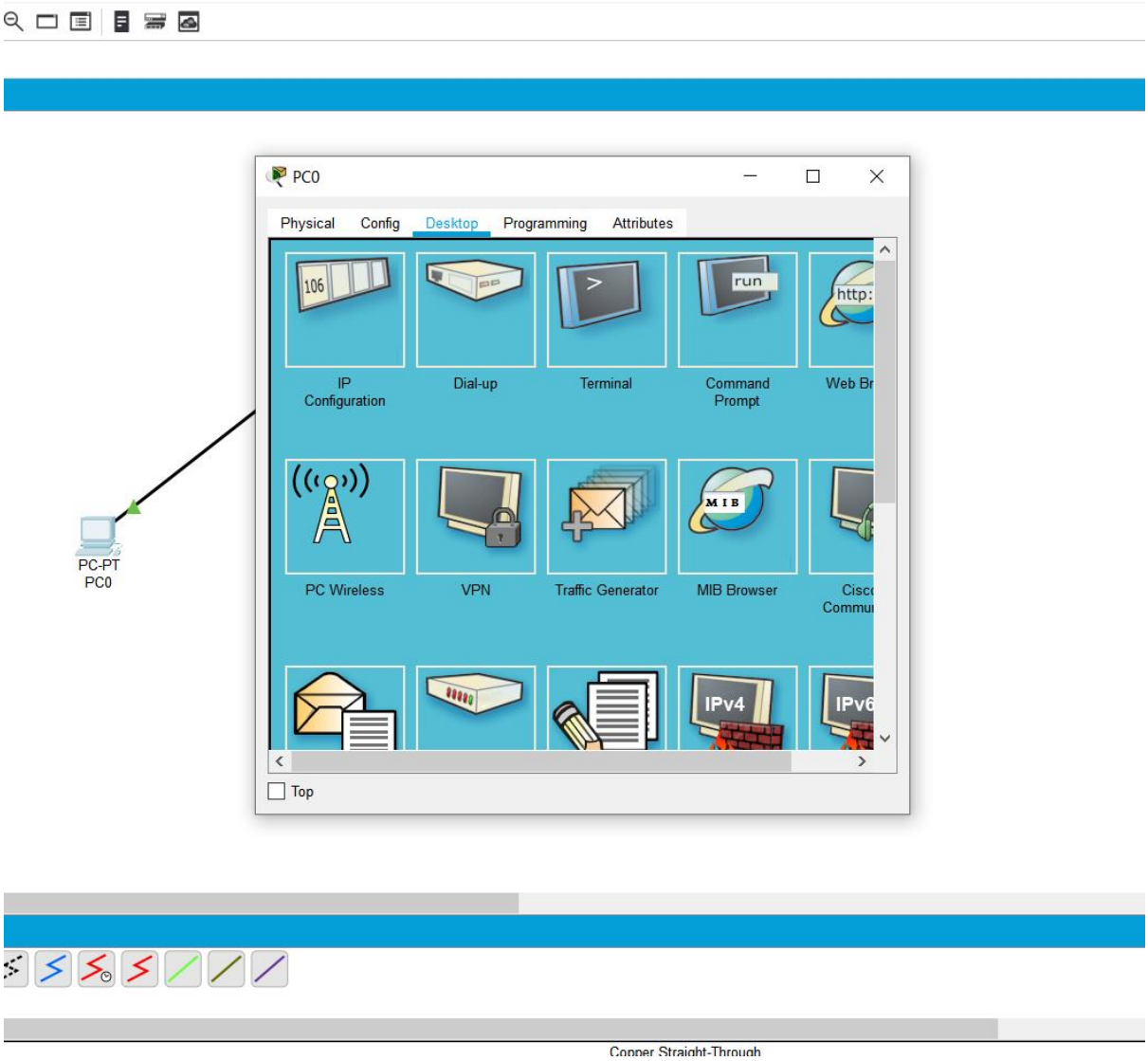


Step 2: Test connectivity from PC0 to PC1

a) Use the ping command to test connectivity.

a. Click PC0.

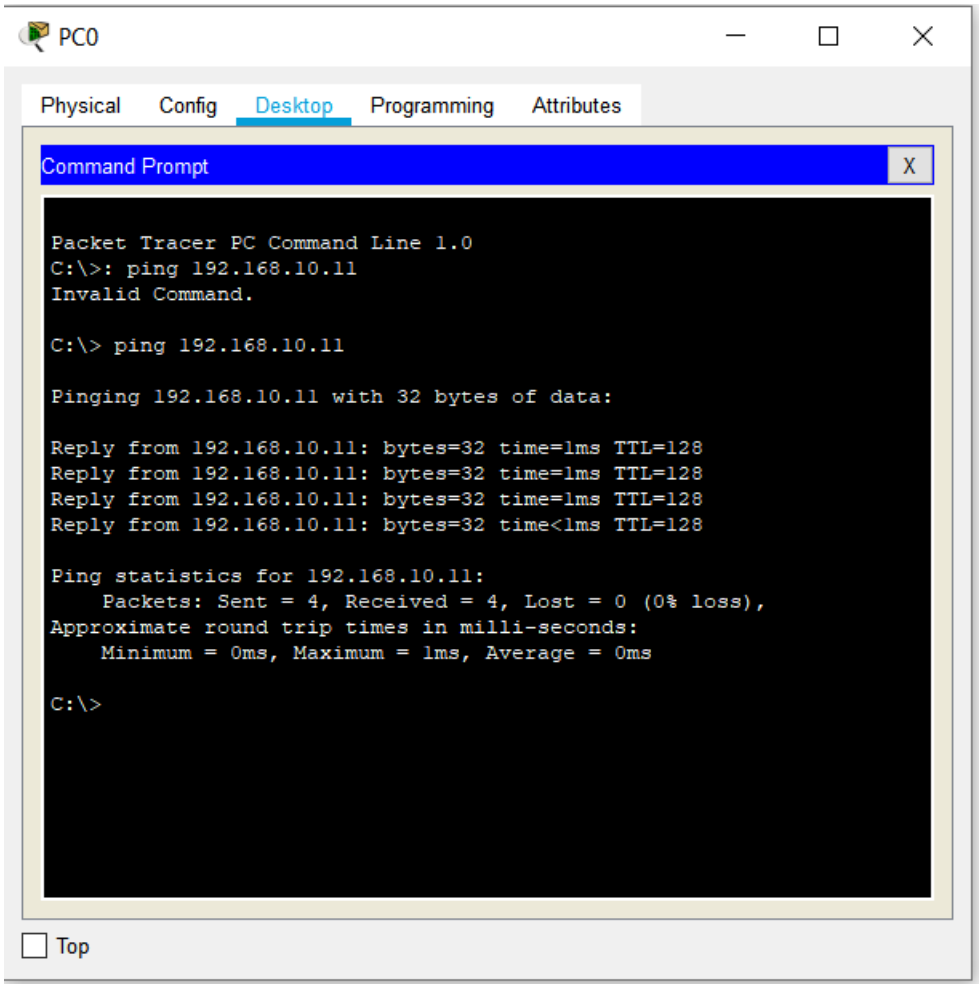
b. Choose the Desktop tab.



c. Choose Command Prompt.

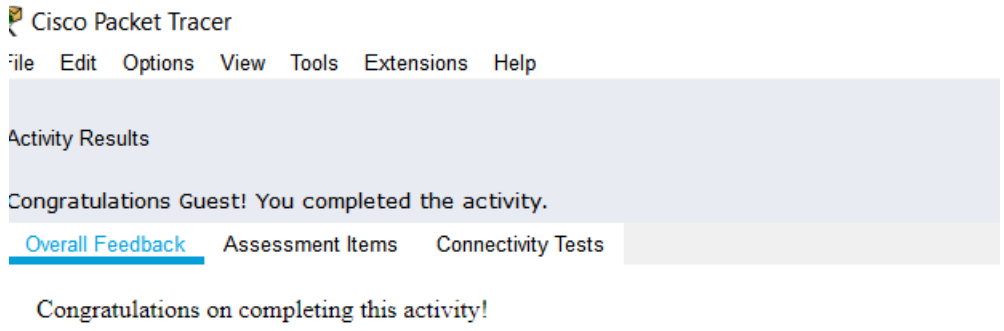
d. Type: ping 192.168.10.11 and press enter.

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:



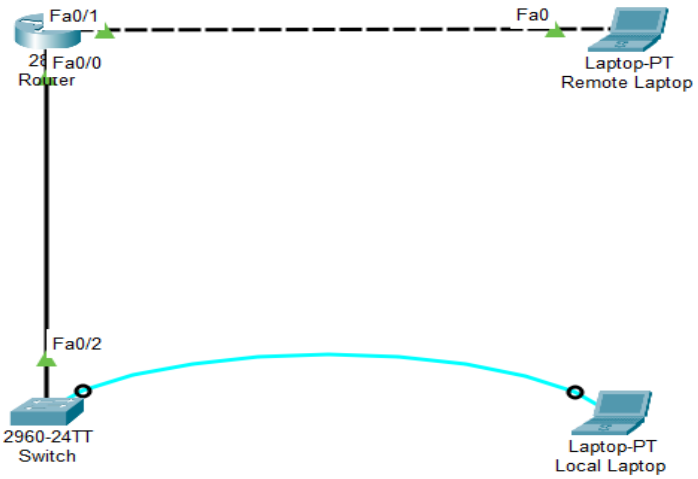
c) Close the configuration window.

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



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.

2. Configure Switch hostname as LOCAL-SWITCH

```
Switch>enable
Password:
Switch#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname LOCAL-SWITCH
LOCAL-SWITCH(config)#
```

Ctrl+F6 to exit CLI focus

☐ Top

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

```
LOCAL-SWITCH>enable
LOCAL-SWITCH#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
LOCAL-SWITCH(config)#banner motd #
Enter TEXT message.  End with the character '#'.
Unauthorized access is forbidden#

LOCAL-SWITCH(config)#exit
LOCAL-SWITCH#
%SYS-5-CONFIG_I: Configured from console by console
exit




LOCAL-SWITCH con0 is now available



Press RETURN to get started.









Unauthorized access is forbidden
```

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

```
LOCAL-SWITCH>enable
LOCAL-SWITCH#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
LOCAL-SWITCH(config)#enable secret cisco
LOCAL-SWITCH(config)#service password-encryption
LOCAL-SWITCH(config)#exit
```

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

```
LOCAL-SWITCH>enable
Password:
Password:
Password:
% Bad secrets

LOCAL-SWITCH>enable
Password:
LOCAL-SWITCH#show running config | include enable
                    ^
% Invalid input detected at '^' marker.

LOCAL-SWITCH#show running-config | include enable
enable secret 5 $1$mERr$hx5rVt7rPNoS4wqbXKX7m0
LOCAL-SWITCH#
```

Ctrl+F6 to exit CLI focus

Top

6. Configure CONSOLE access with the following settings :

- Login enabled

- Password : whatever you like

- History size : 15 commands

- Timeout : 6'45"

- Synchronous logging

```
LOCAL-SWITCH>enable
Password:
LOCAL-SWITCH#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
LOCAL-SWITCH(config)#line console 0
LOCAL-SWITCH(config-line)#password abhir
LOCAL-SWITCH(config-line)#login
LOCAL-SWITCH(config-line)#history size 15
LOCAL-SWITCH(config-line)#exec-timeout 6 45
LOCAL-SWITCH(config-line)#logging synchronous
LOCAL-SWITCH(config-line)#exit
LOCAL-SWITCH(config)#
LOCAL-SWITCH(config)#exit
LOCAL-SWITCH#
%SYS-5-CONFIG_I: Configured from console by console

LOCAL-SWITCH#
```

6. Configure TELNET access with the following settings :

- Login enabled

- Password : whatever you like

- History size : 15 commands

- Timeout : 8'20"

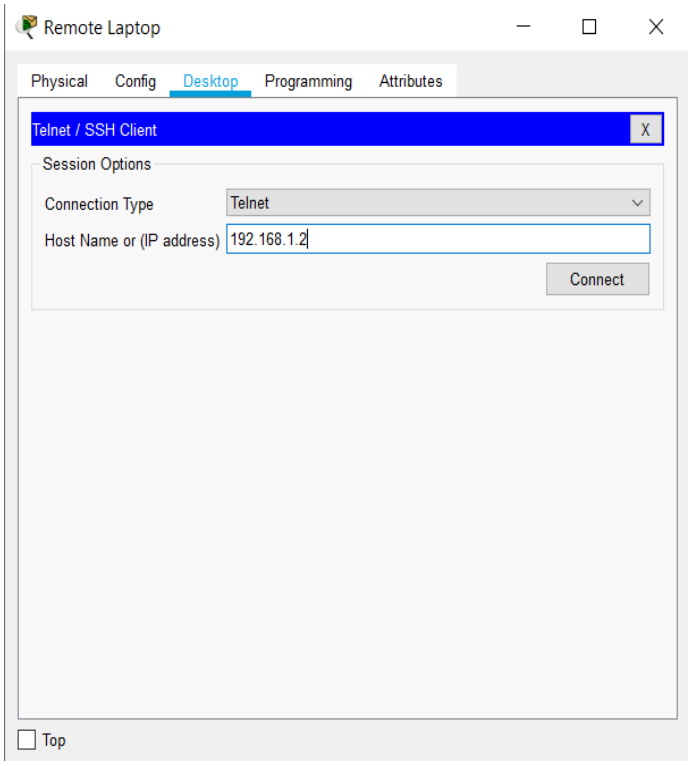
- Synchronous logging

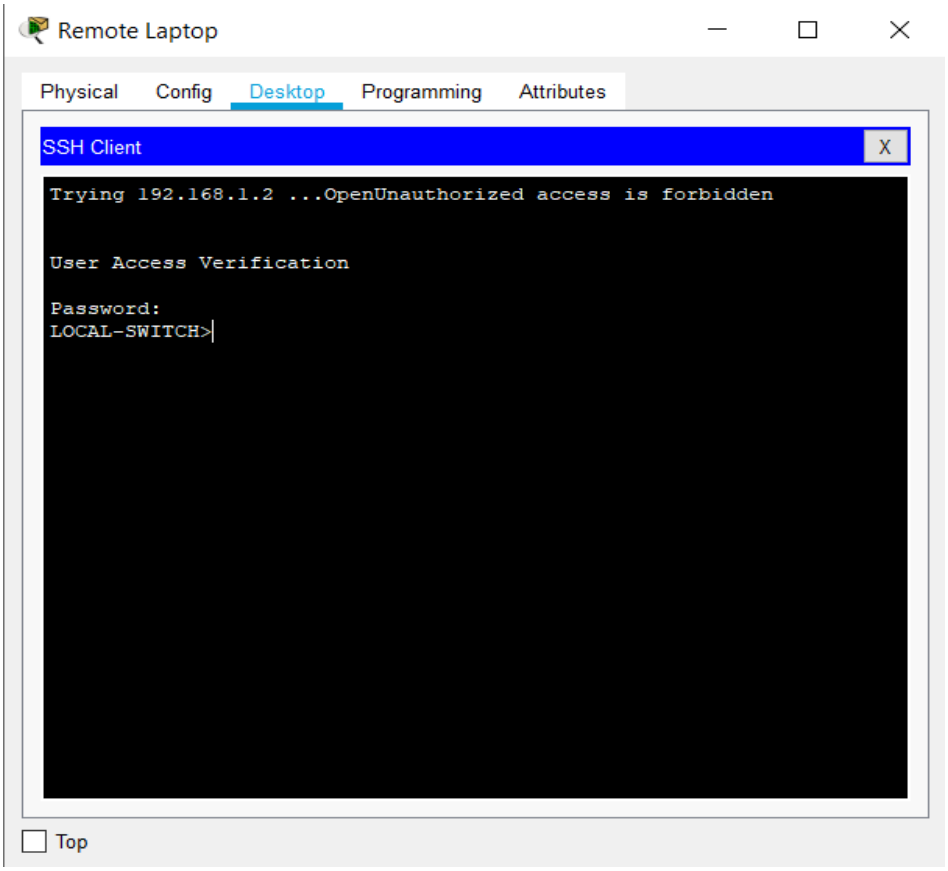
```
LOCAL-SWITCH>enable
Password:
Password:
LOCAL-SWITCH#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
LOCAL-SWITCH(config)#line vty 0 15
LOCAL-SWITCH(config-line)#password abhir
LOCAL-SWITCH(config-line)#login
LOCAL-SWITCH(config-line)#history size 15
LOCAL-SWITCH(config-line)#exec-timeout 8 20
LOCAL-SWITCH(config-line)#logging synchronous
LOCAL-SWITCH(config-line)#exit
LOCAL-SWITCH(config)#exit
LOCAL-SWITCH#
%SYS-5-CONFIG_I: Configured from console by console

LOCAL-SWITCH#
```

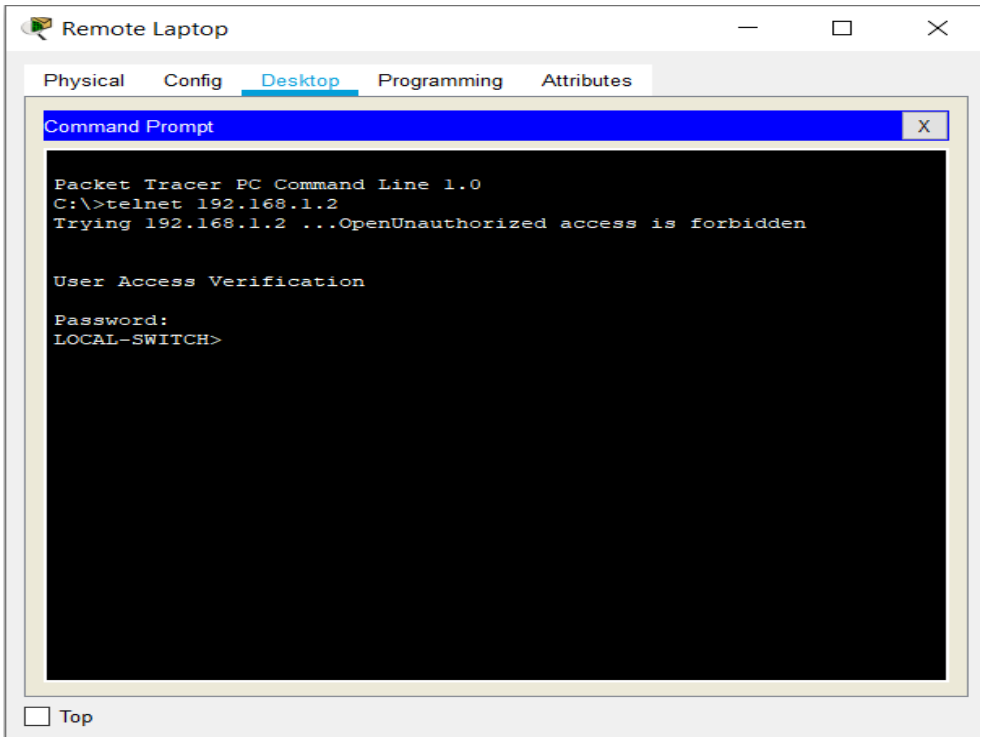
7. Configure the IP address of the switch as 192.168.1.2/24 and it's default gateway IP (192.168.1.1).

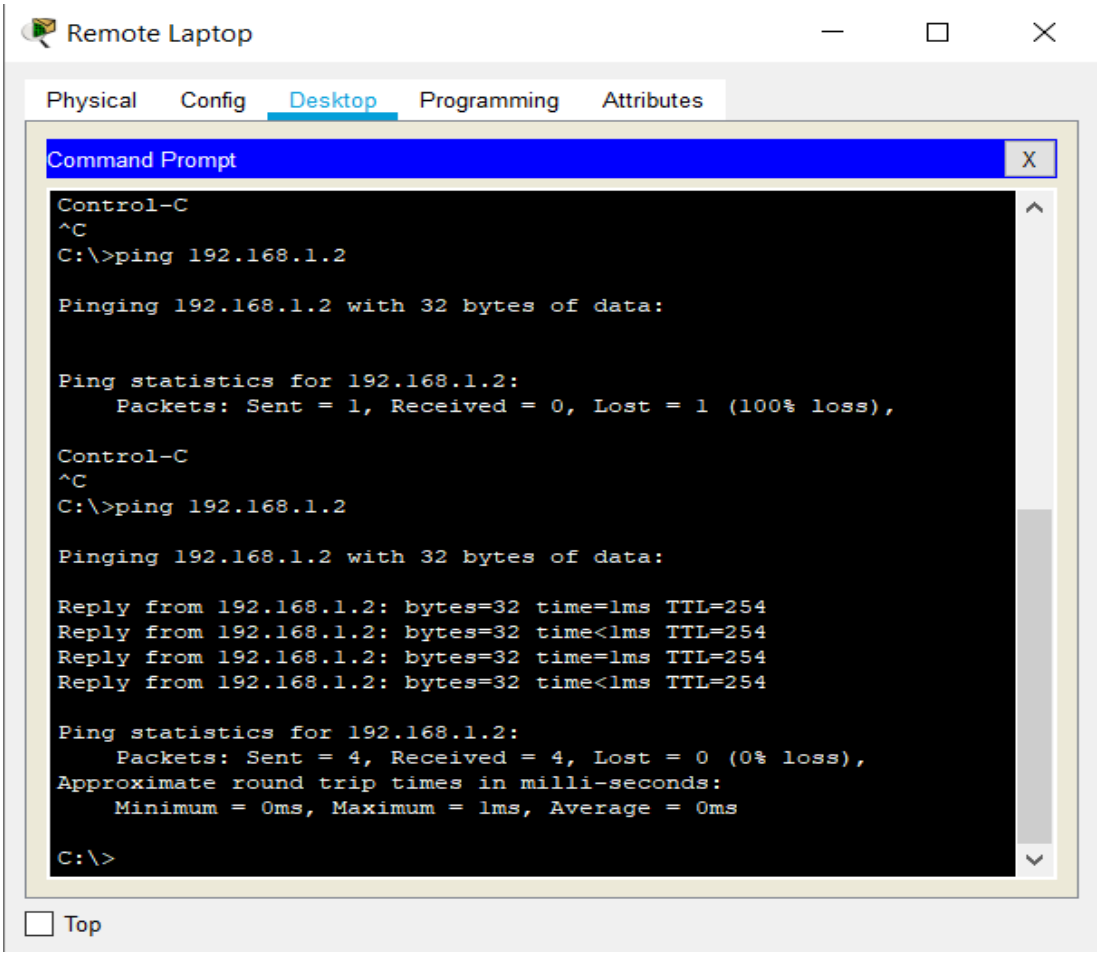
```
LOCAL-SWITCH>enable
Password:
LOCAL-SWITCH#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
LOCAL-SWITCH(config)#interface vlan1
LOCAL-SWITCH(config-if)#ip address 192.168.1.2 255.255.255.0
LOCAL-SWITCH(config-if)#ip default-gateway 192.168.1.1
LOCAL-SWITCH(config)#exit
LOCAL-SWITCH#
%SYS-5-CONFIG_I: Configured from console by console

LOCAL-SWITCH#exit
```

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




Remote Laptop
Physical
Config
Desktop
Programming
Attributes
SSH Client
X
Trying 192.168.1.2 ...OpenUnauthorized access is forbidden
User Access Verification
Password:
LOCAL-SWITCH>
Top


Remote Laptop
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
Packet Tracer PC Command Line 1.0
C:\>telnet 192.168.1.2
Trying 192.168.1.2 ...OpenUnauthorized access is forbidden
User Access Verification
Password:
LOCAL-SWITCH>
Top


Remote Laptop
Physical
Config
Desktop
Programming
Attributes
Command Prompt
X
Control-C
^C
C:\>ping 192.168.1.2
Pinging 192.168.1.2 with 32 bytes of data:
Ping statistics for 192.168.1.2:
Packets: Sent = 1, Received = 0, Lost = 1 (100% loss),
Control-C
^C
C:\>ping 192.168.1.2
Pinging 192.168.1.2 with 32 bytes of data:
Reply from 192.168.1.2: bytes=32 time=1ms TTL=254
Reply from 192.168.1.2: bytes=32 time<1ms TTL=254
Reply from 192.168.1.2: bytes=32 time=1ms TTL=254
Reply from 192.168.1.2: bytes=32 time<1ms TTL=254
Ping statistics for 192.168.1.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 1ms, Average = 0ms
C:\>
Top