Computer Networks

Lab 13

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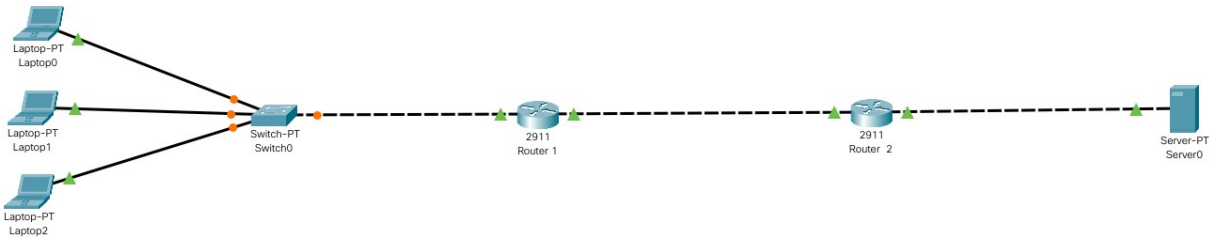
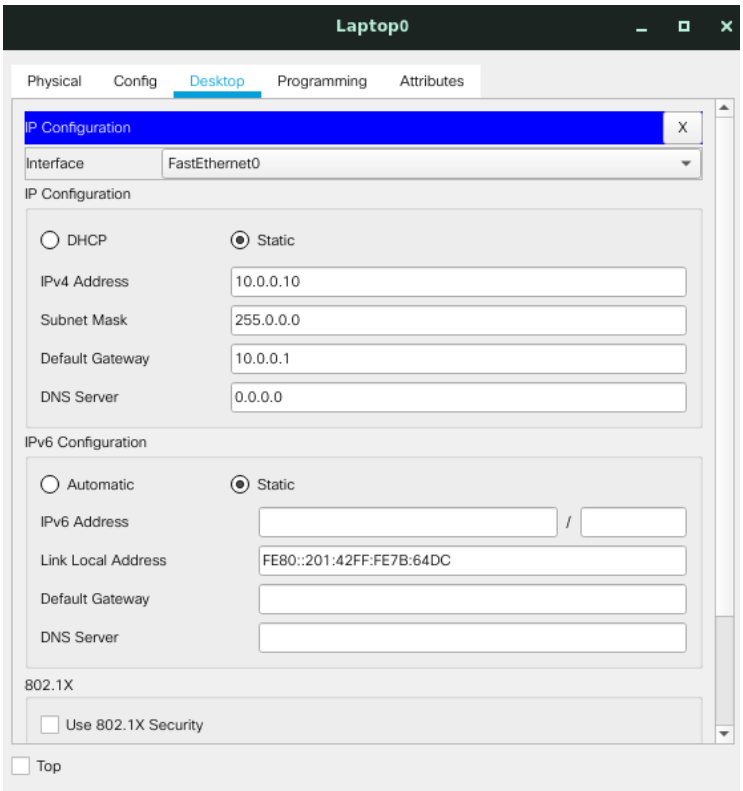
20P-0117
BSSE-5A

Task:

Topology:
The network is like this.



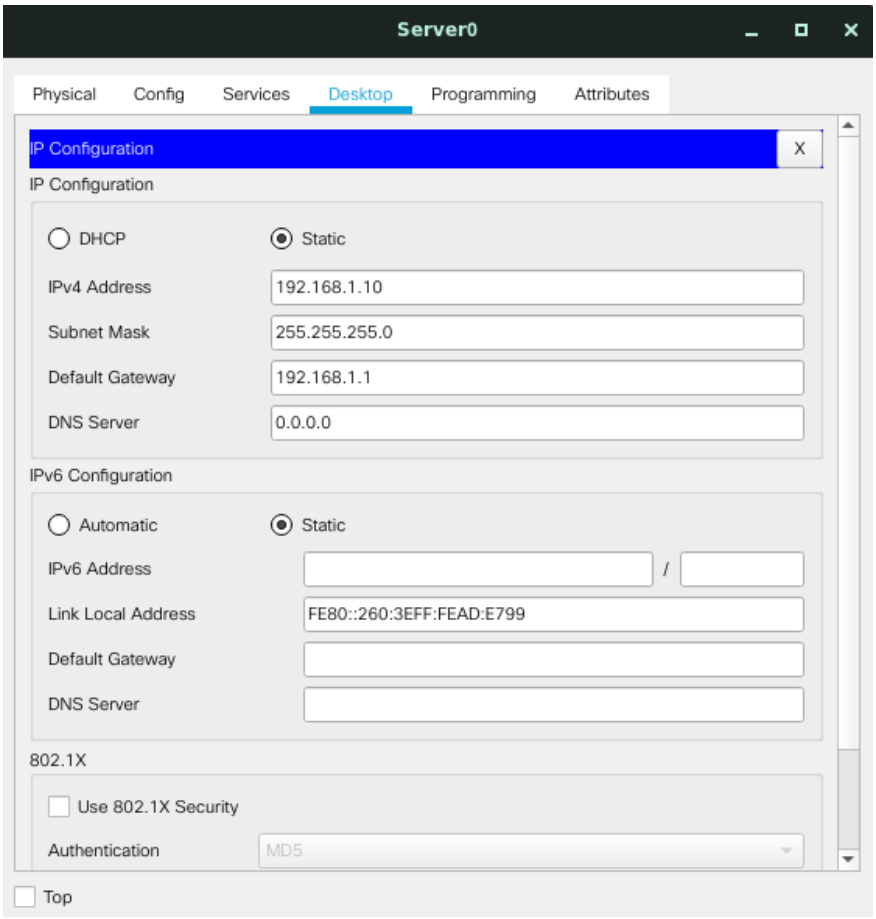
Steps:
First assign IP to all the PC and laptops and also assign Default gateway.



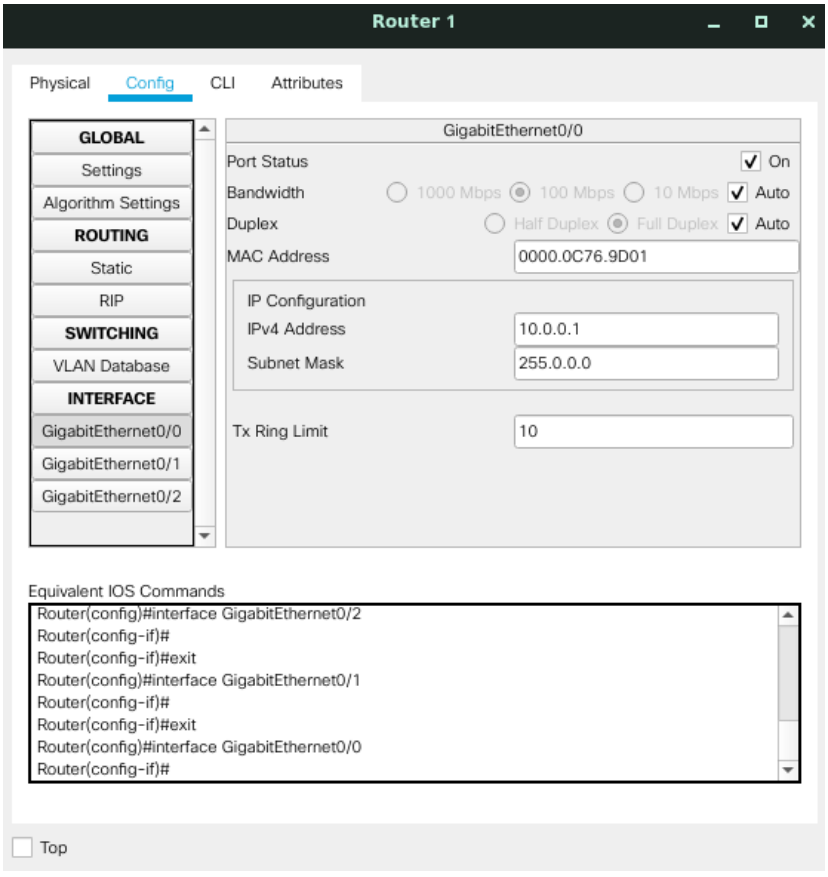

Laptop1
Physical
Config
Desktop
Programming
Attributes
MODULES
WPC300N
PT-LAPTOP-NM-1AM
PT-LAPTOP-NM-1CE
PT-LAPTOP-NM-1CFE
PT-LAPTOP-NM-1CGE
PT-LAPTOP-NM-1FFE
PT-LAPTOP-NM-1FGE
PT-LAPTOP-NM-1W
PT-LAPTOP-NM-1W-A
PT-LAPTOP-NM-1W-AC
PT-LAPTOP-NM-3G/4G
PT-HEADPHONE
PT-MICROPHONE
Physical Device View
Zoom In
Original Size
Zoom Out
Customize Icon in Physical View
Customize Icon in Logical View
The Linksys-WPC300N module provides one 2.4GHz wireless interface suitable for connection to wireless networks. The module supports protocols that use Ethernet for LAN access.
Top

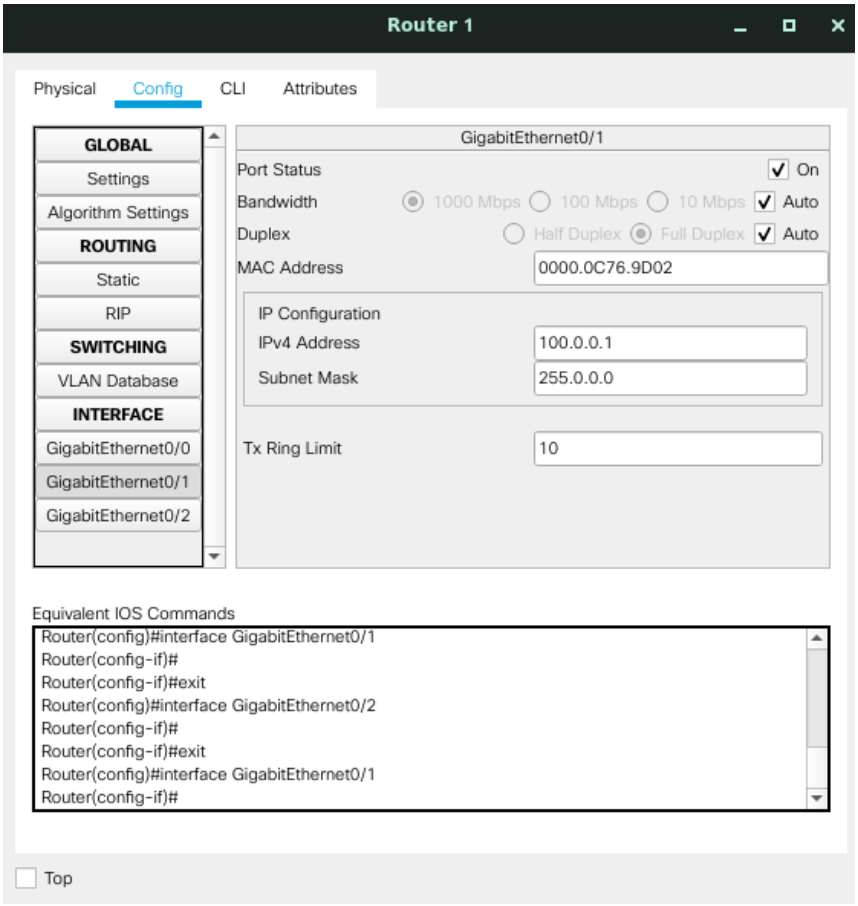

Laptop2
Physical
Config
Desktop
Programming
Attributes
MODULES
WPC300N
PT-LAPTOP-NM-1AM
PT-LAPTOP-NM-1CE
PT-LAPTOP-NM-1CFE
PT-LAPTOP-NM-1CGE
PT-LAPTOP-NM-1FFE
PT-LAPTOP-NM-1FGE
PT-LAPTOP-NM-1W
PT-LAPTOP-NM-1W-A
PT-LAPTOP-NM-1W-AC
PT-LAPTOP-NM-3G/4G
PT-HEADPHONE
PT-MICROPHONE
Physical Device View
Zoom In
Original Size
Zoom Out
Customize Icon in Physical View
Customize Icon in Logical View
The Linksys-WPC300N module provides one 2.4GHz wireless interface suitable for connection to wireless networks. The module supports protocols that use Ethernet for LAN access.
Top

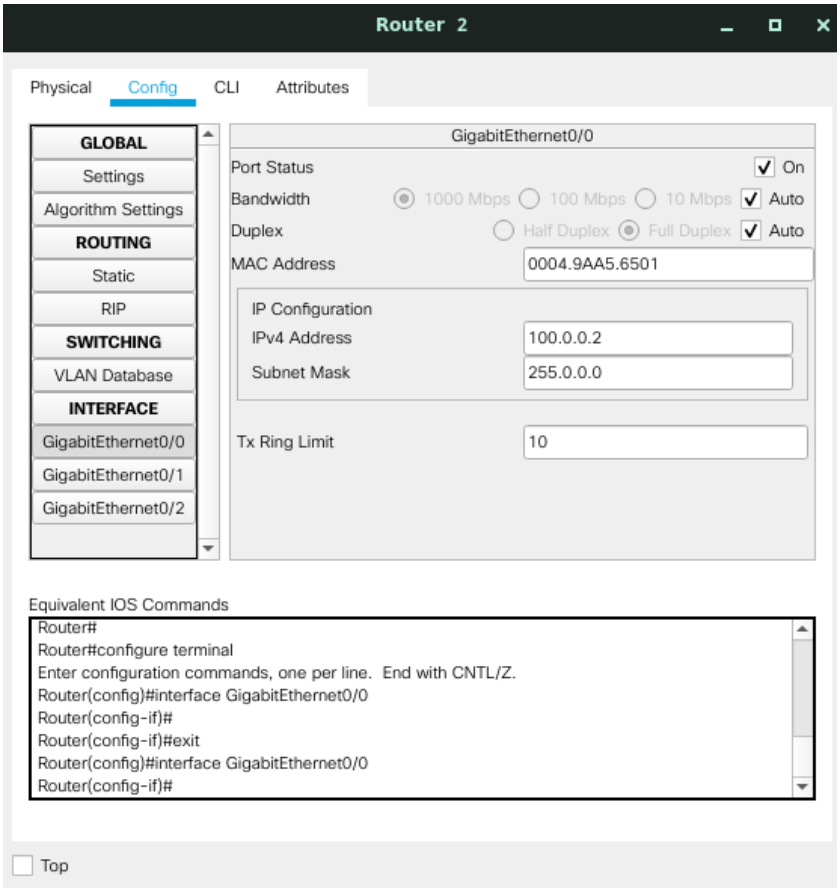
Now do configuration of server.

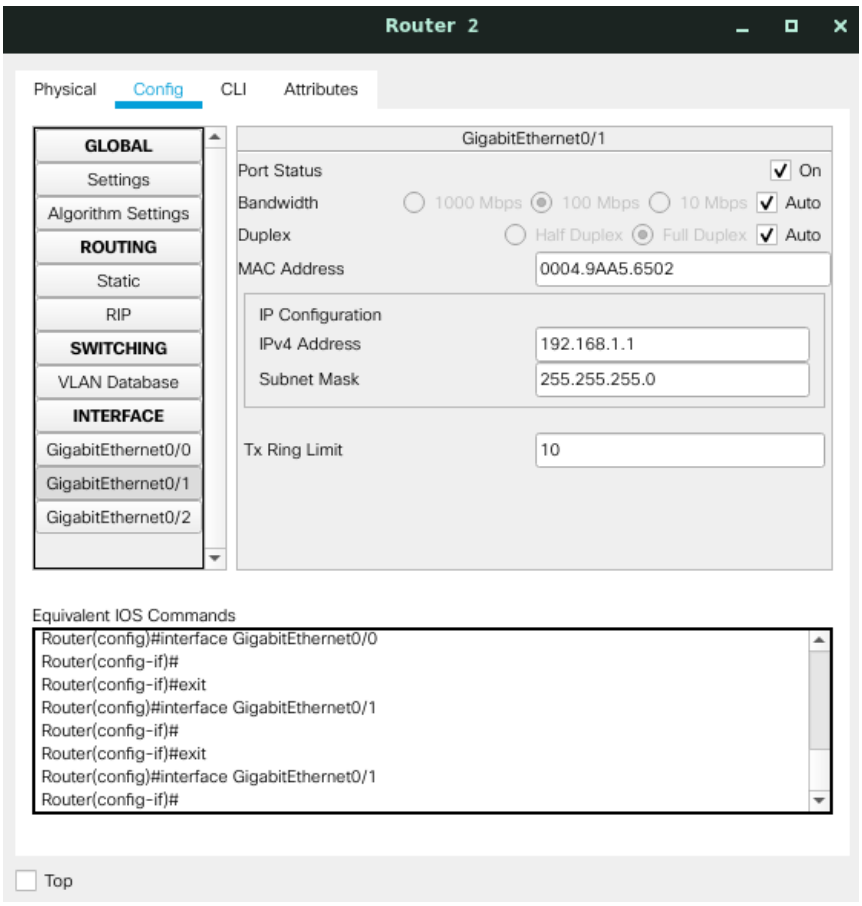


Now, do configuration of router connections by assigning IPs.

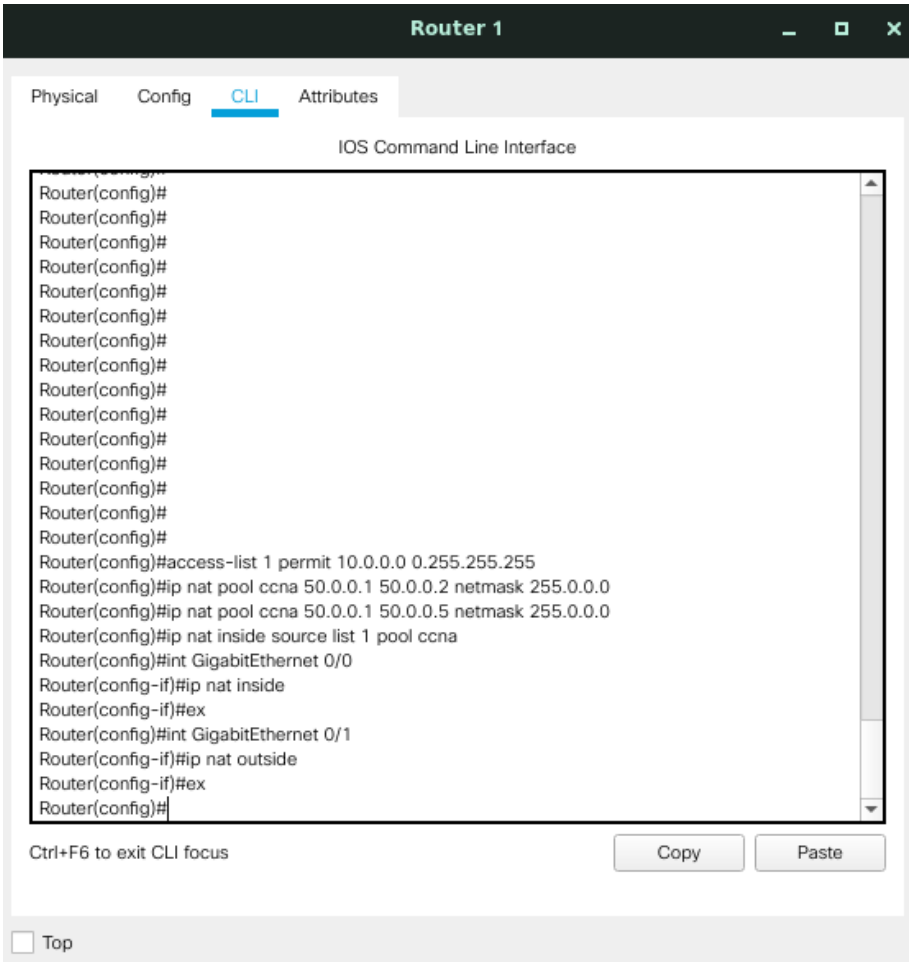



Router 1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0
GigabitEthernet0/1
GigabitEthernet0/2
GigabitEthernet0/1
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0000.0C76.9D02
IP Configuration
IPv4 Address
100.0.0.1
Subnet Mask
255.0.0.0
Tx Ring Limit
10
Equivalent IOS Commands
Router(config)#interface GigabitEthernet0/1
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/2
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/1
Router(config-if)#
Top

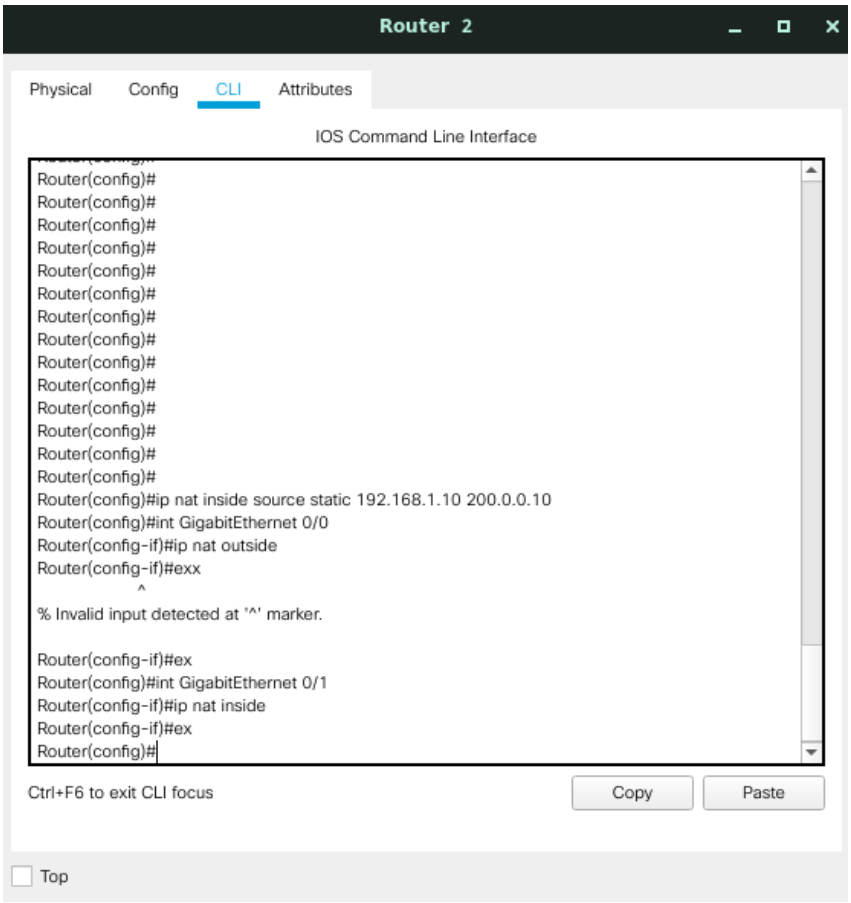

Router 2
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0
GigabitEthernet0/1
GigabitEthernet0/2
GigabitEthernet0/0
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0004.9AA5.6501
IP Configuration
IPv4 Address
100.0.0.2
Subnet Mask
255.0.0.0
Tx Ring Limit
10
Equivalent IOS Commands
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/0
Router(config-if)#
Top



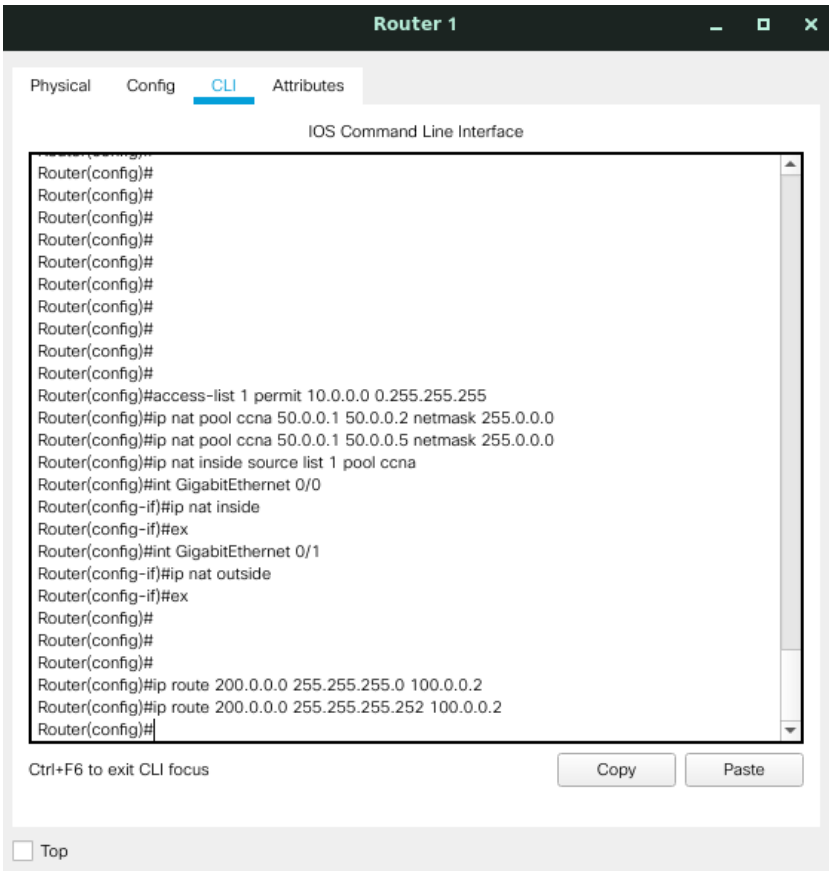
Now setup the **Dynamic NAT** addresses of router 1.

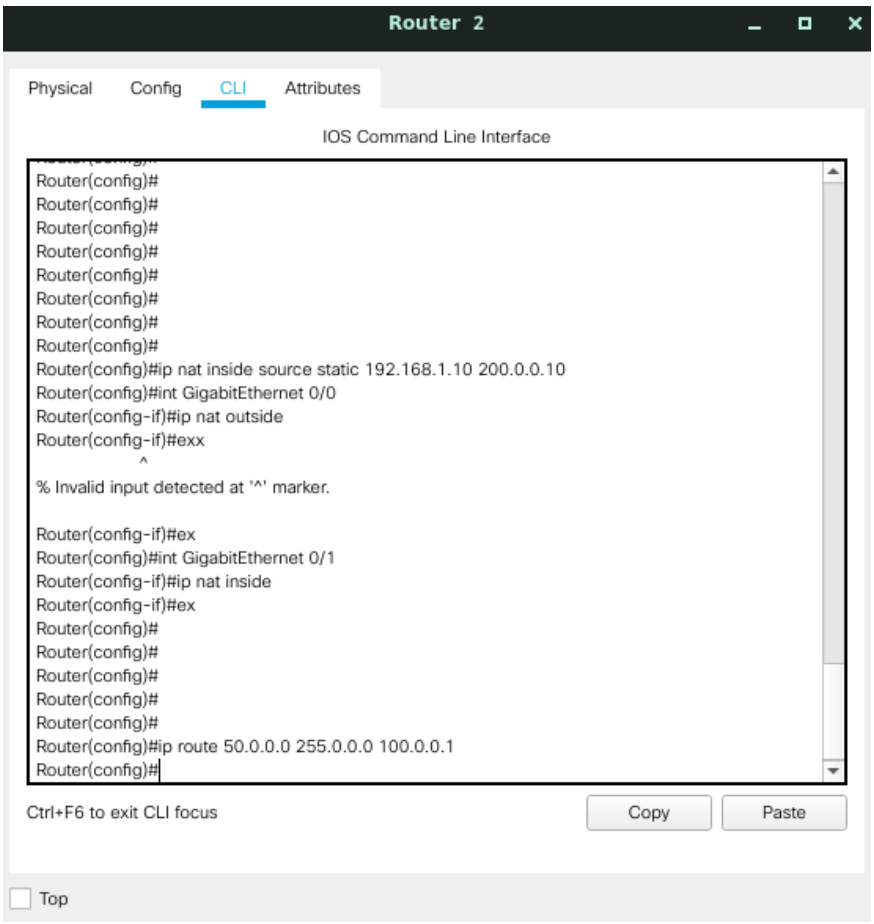


Now setup the **Static NAT** addresses of router 2.

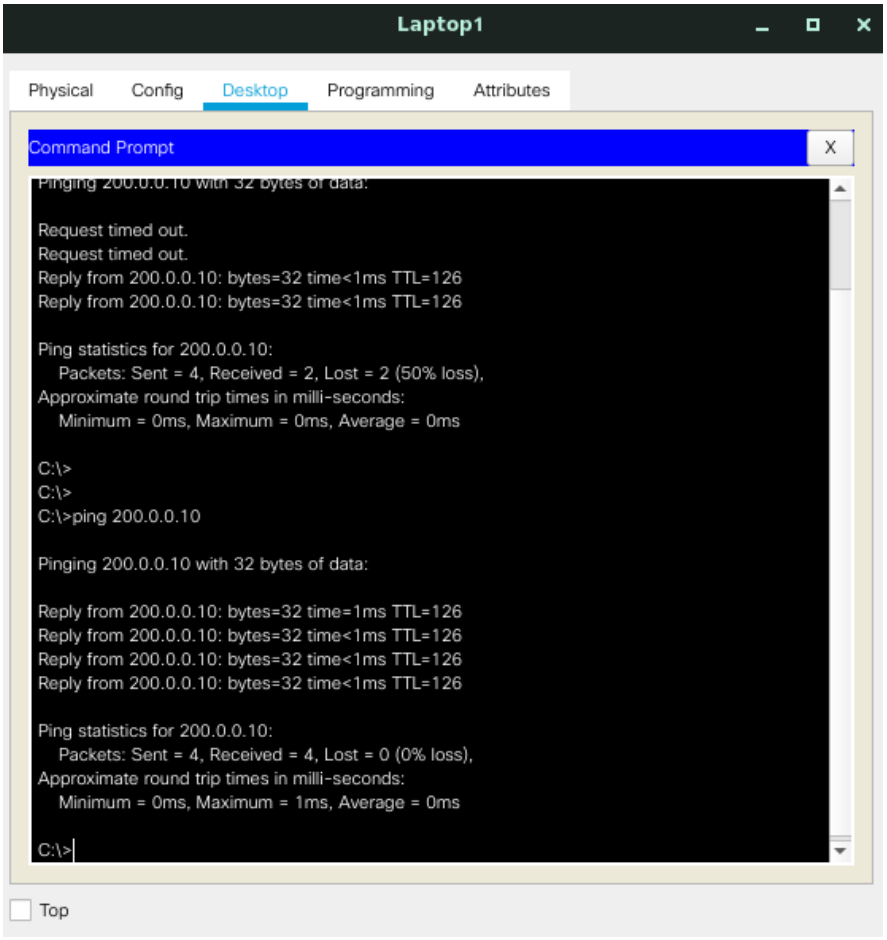


Now do configuration of route of routers.





Now you can verify your NAT connection by pinging through PC or laptops.



And can also verify by URL through browser.