Name：Izaan Mohtashim

Roll No: P20-0613

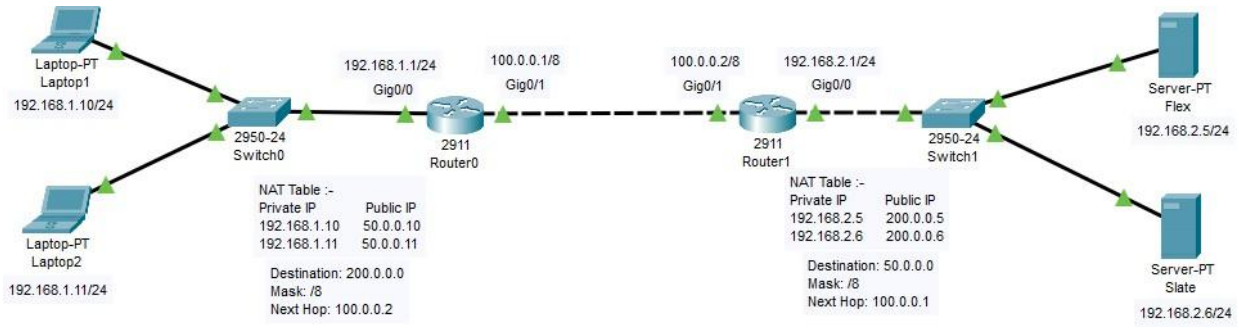
Sec: 5-A

Computer Networks

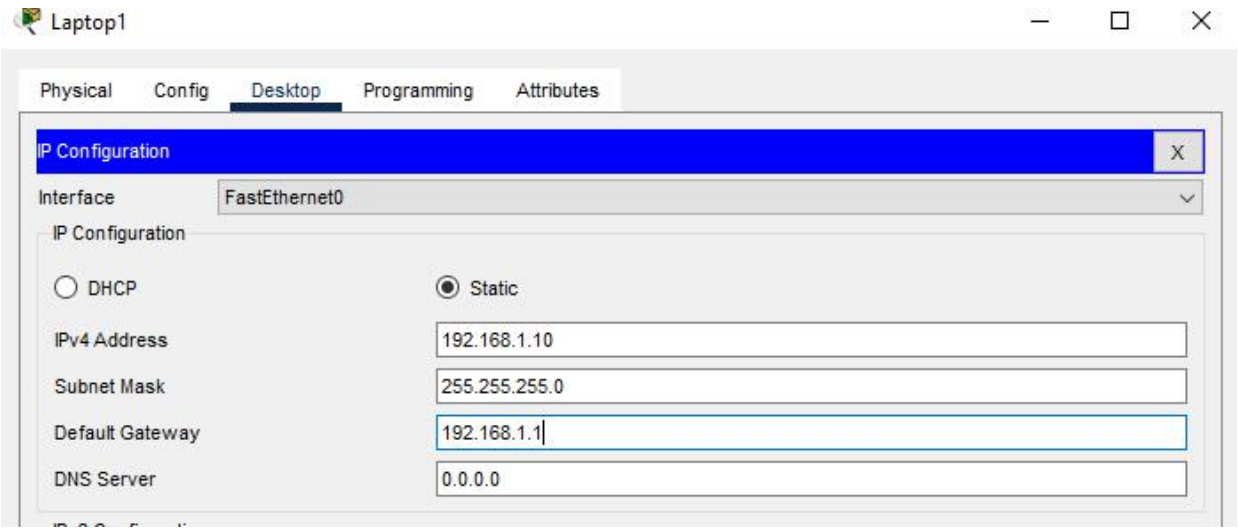
Lab Task 12

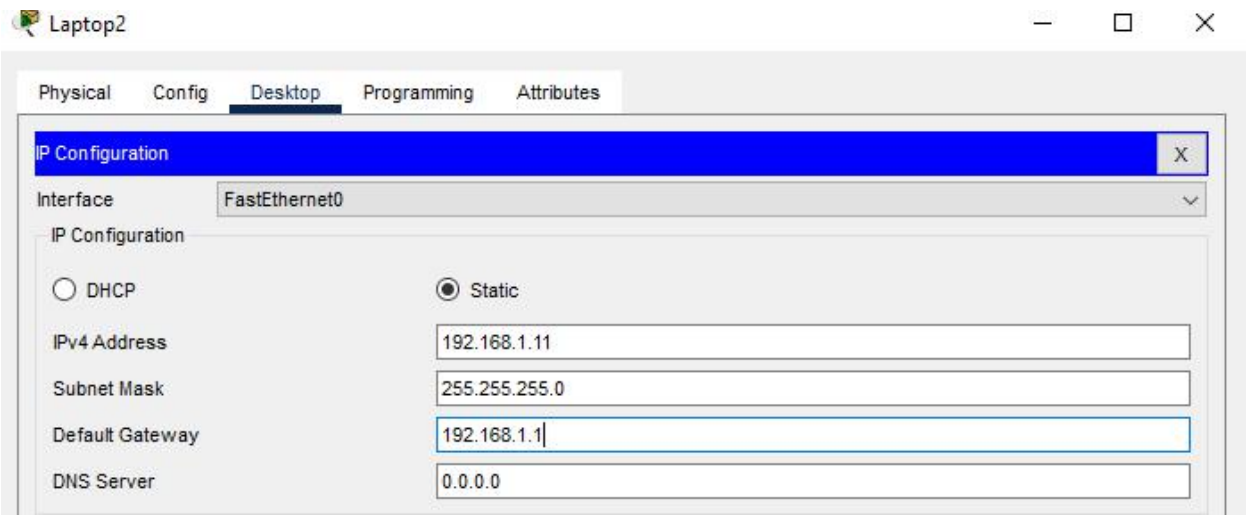
Implement the S-NAT for web servers of (flex and slate) in a single topology.

Topology:



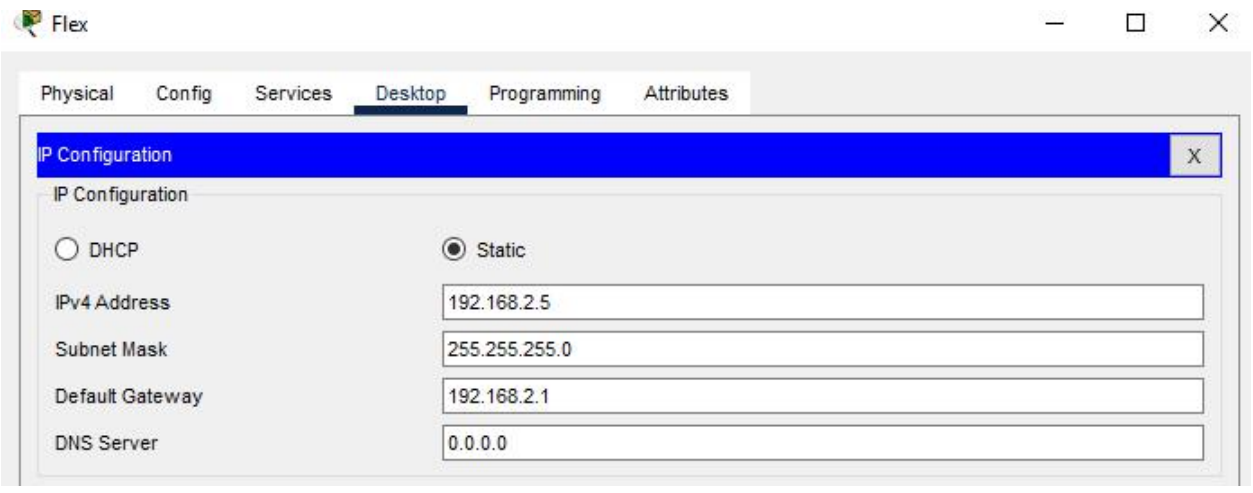
PC configuration :



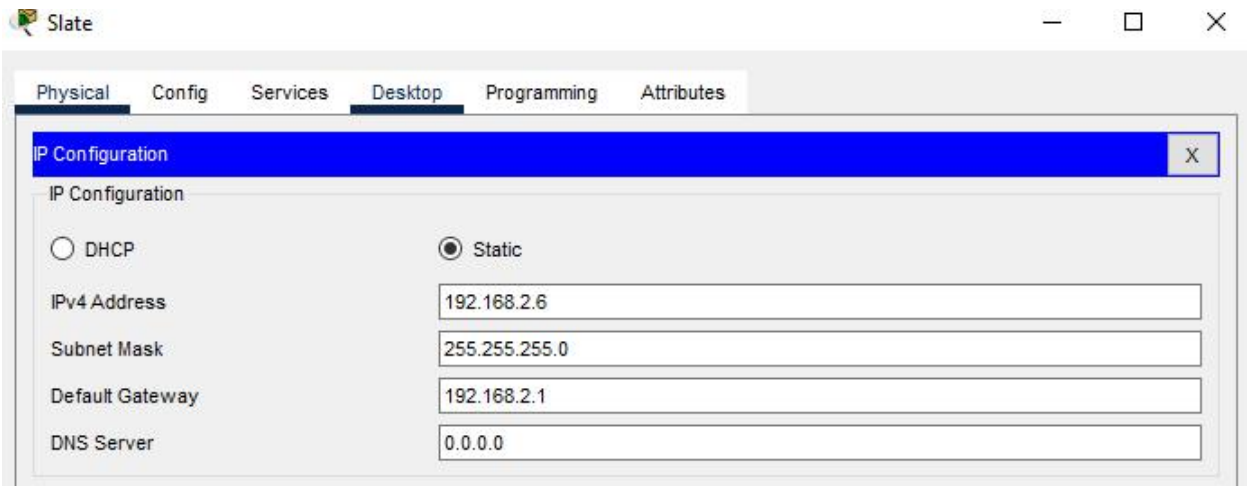


Server Configuration :

Flex:

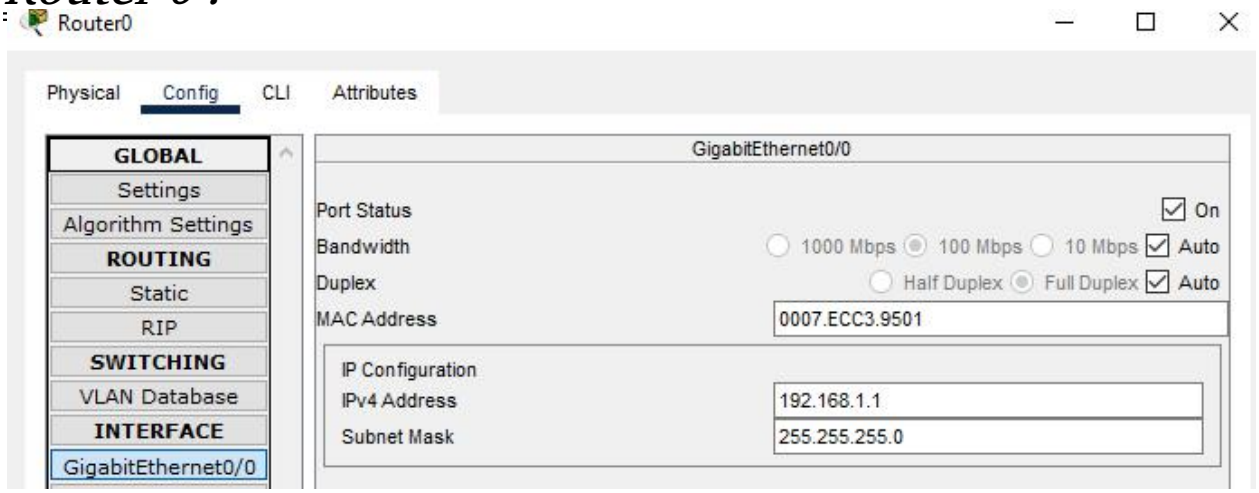


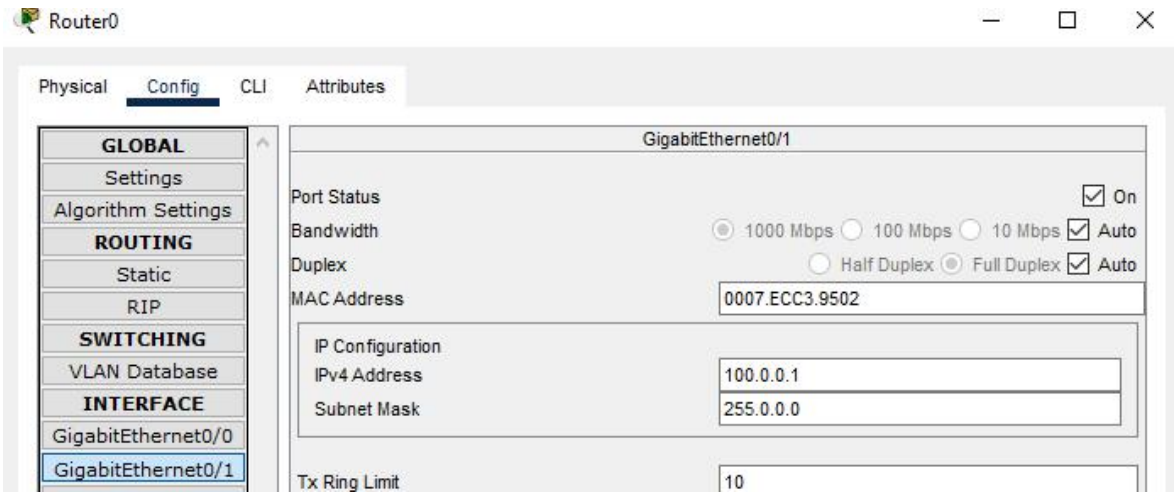
Slate:



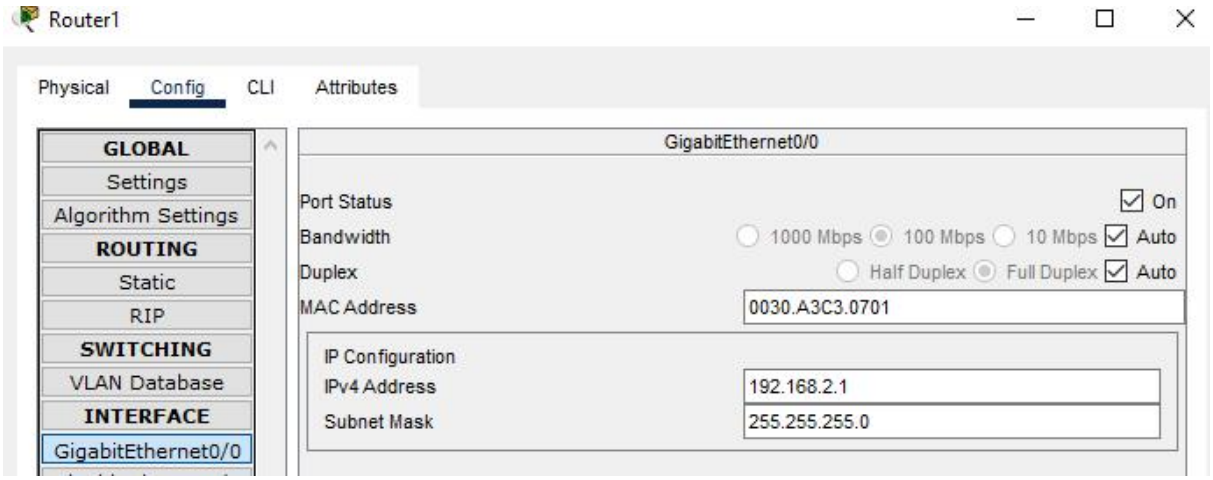
Router Configuration :

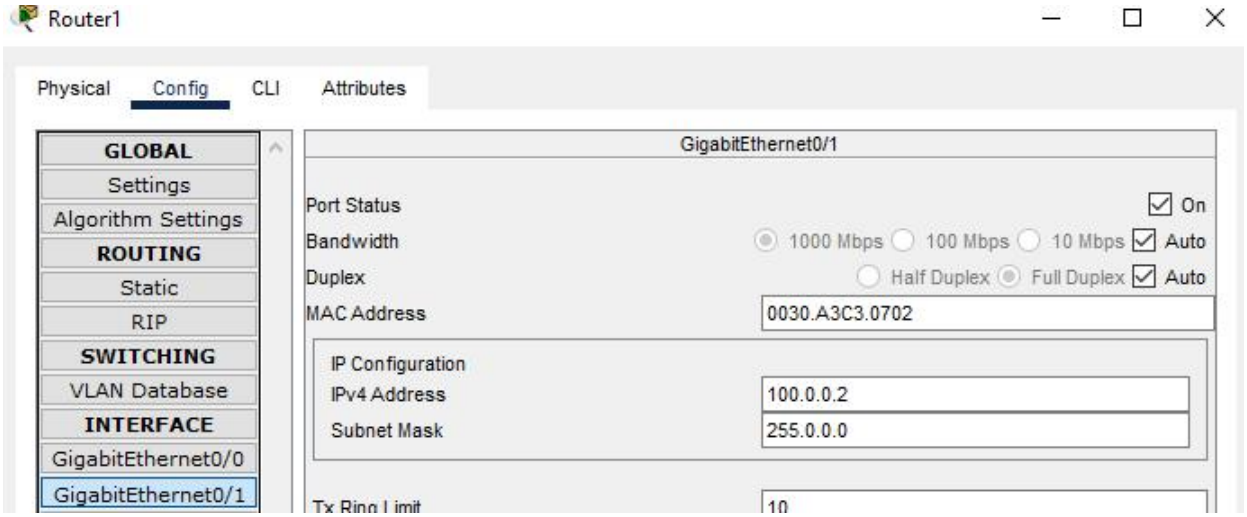
Router 0 :





Router1 :


Router1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0
GigabitEthernet0/0
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0030.A3C3.0701
IP Configuration
IPv4 Address
192.168.2.1
Subnet Mask
255.255.255.0


Router1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0
GigabitEthernet0/1
GigabitEthernet0/1
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0030.A3C3.0702
IP Configuration
IPv4 Address
100.0.0.2
Subnet Mask
255.0.0.0
Tx Ring Limit
10

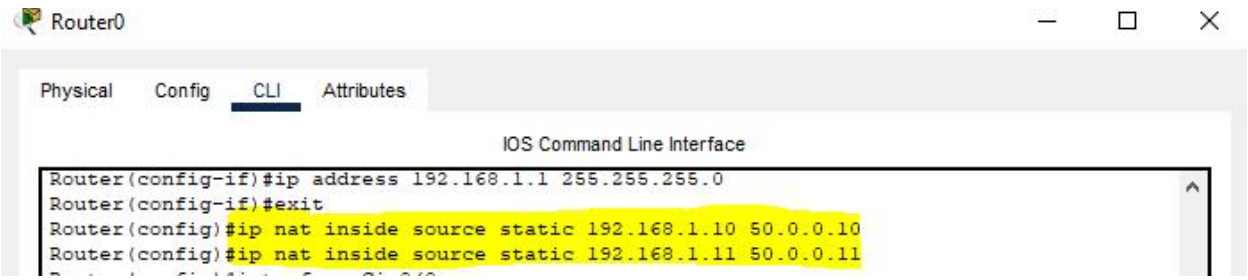
Configure Static NAT:

For Router 0 :

Static NAT configuiation iequiies thiee steps

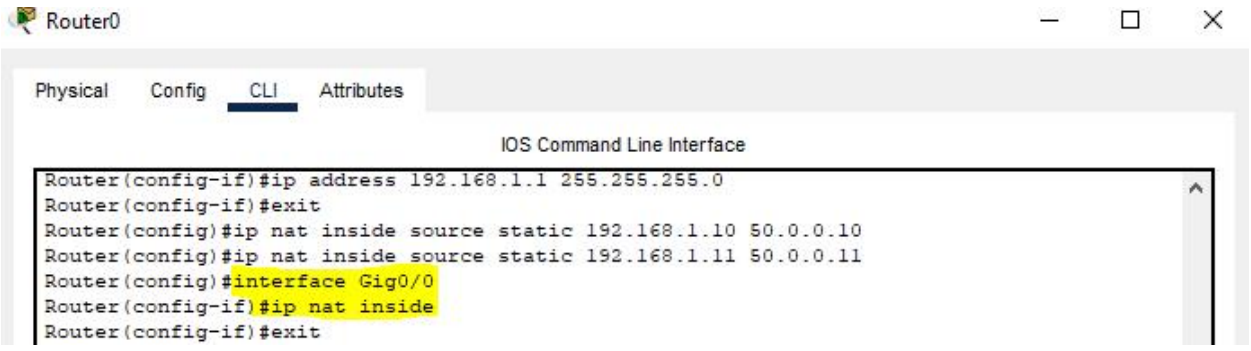
1. **Define IP address mapping :**

In static NAT, we have to map each inside local IP addiess with inside global IP addiess. Following command in Scieen Shot is used foi mapping.



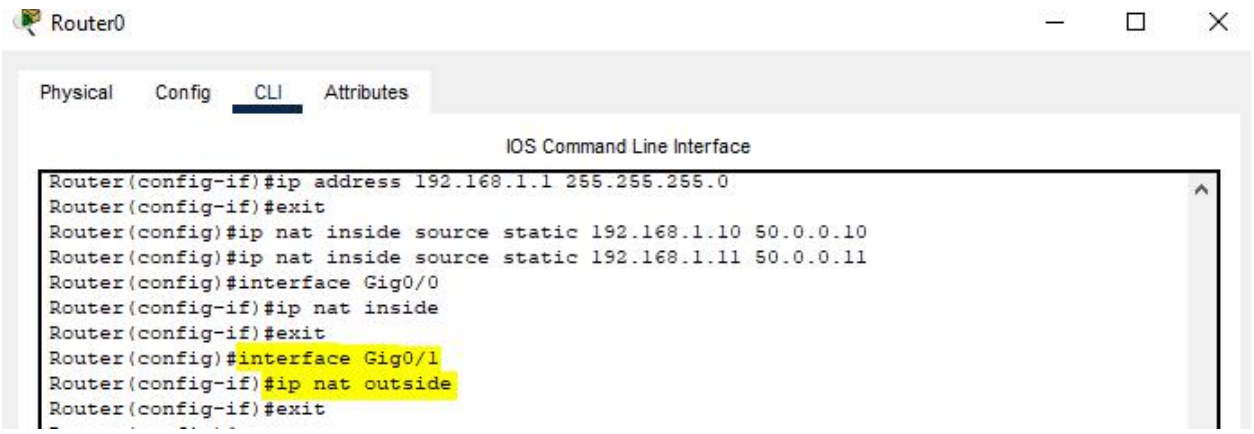
2. **Define inside local interface**:

In the second step we have to define which inteiface is connected with the local netwoik.Following command will define inteiface Gig0/0 as inside local.



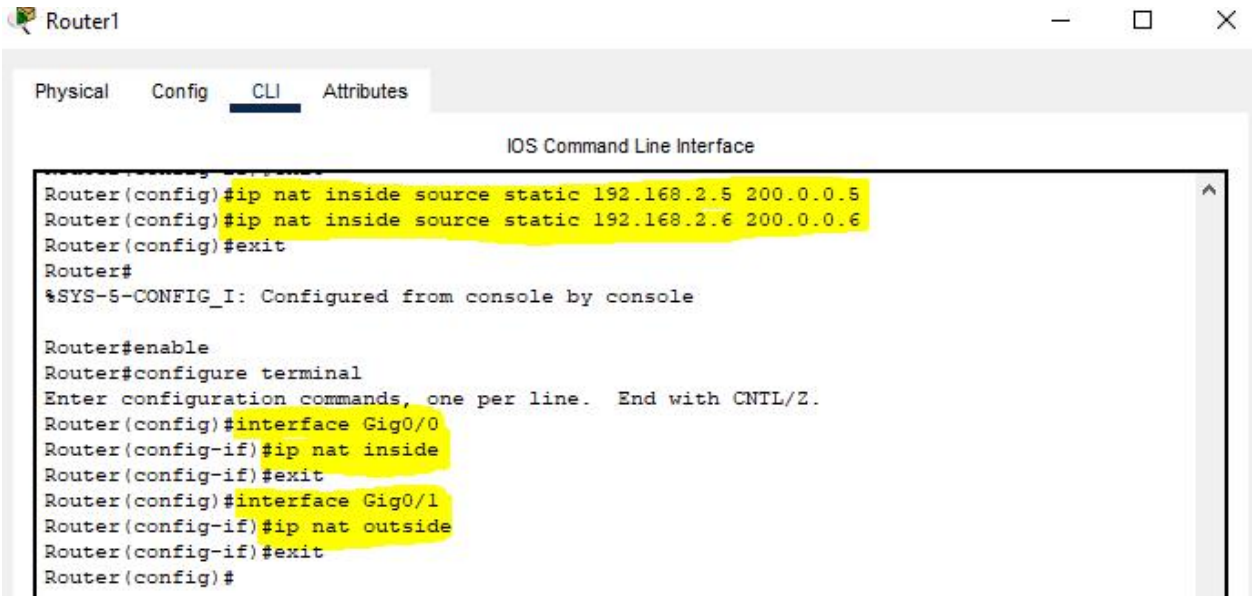
3. **Define inside global interface**:

In the thiid step we have to define which inteiface is connected with the global netwoik.Following command will define inteiface Gig0/1 as inside global.



For Router1 :

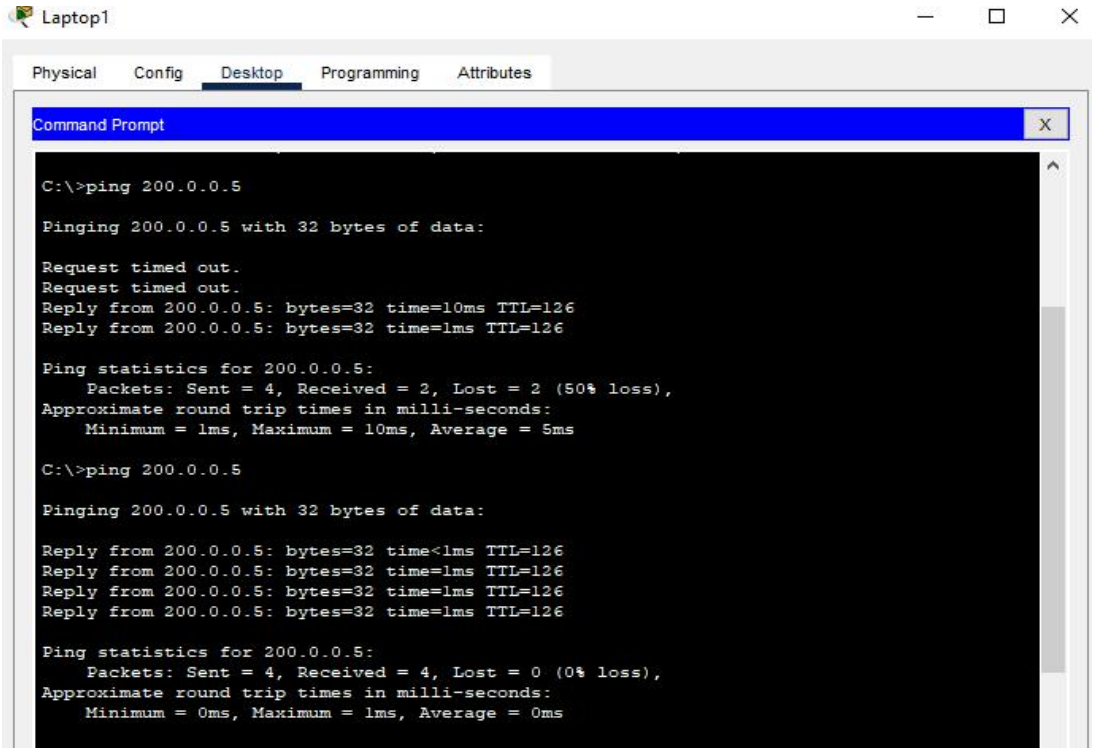
We will repeat the same three steps for this router:

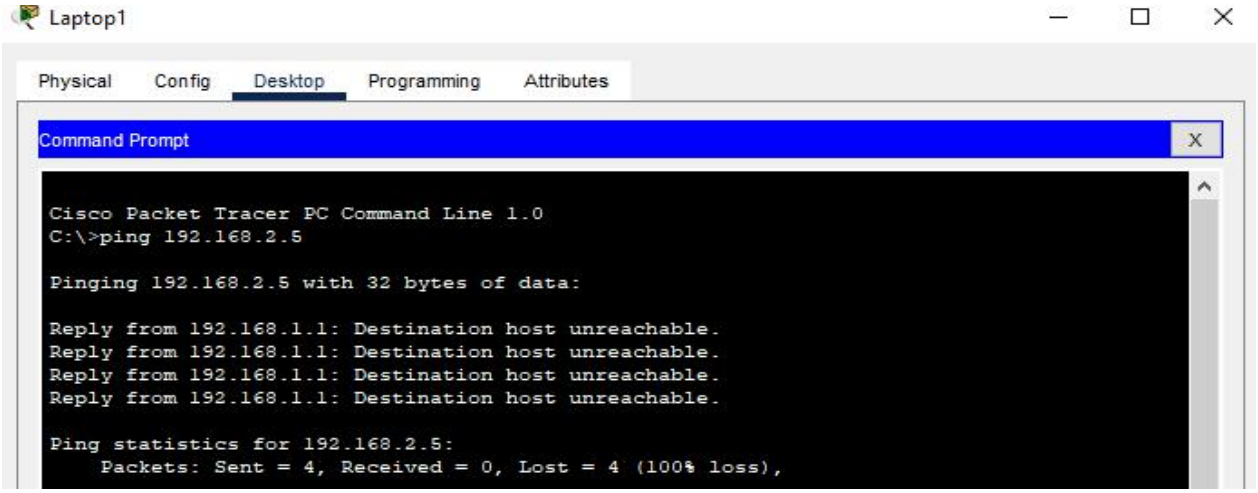


Testing Static NAT Configuíation :

To test this setup click Laptop 1 and Desktop and click Command Piompt.

- Run ping 200.0.0.5 command.

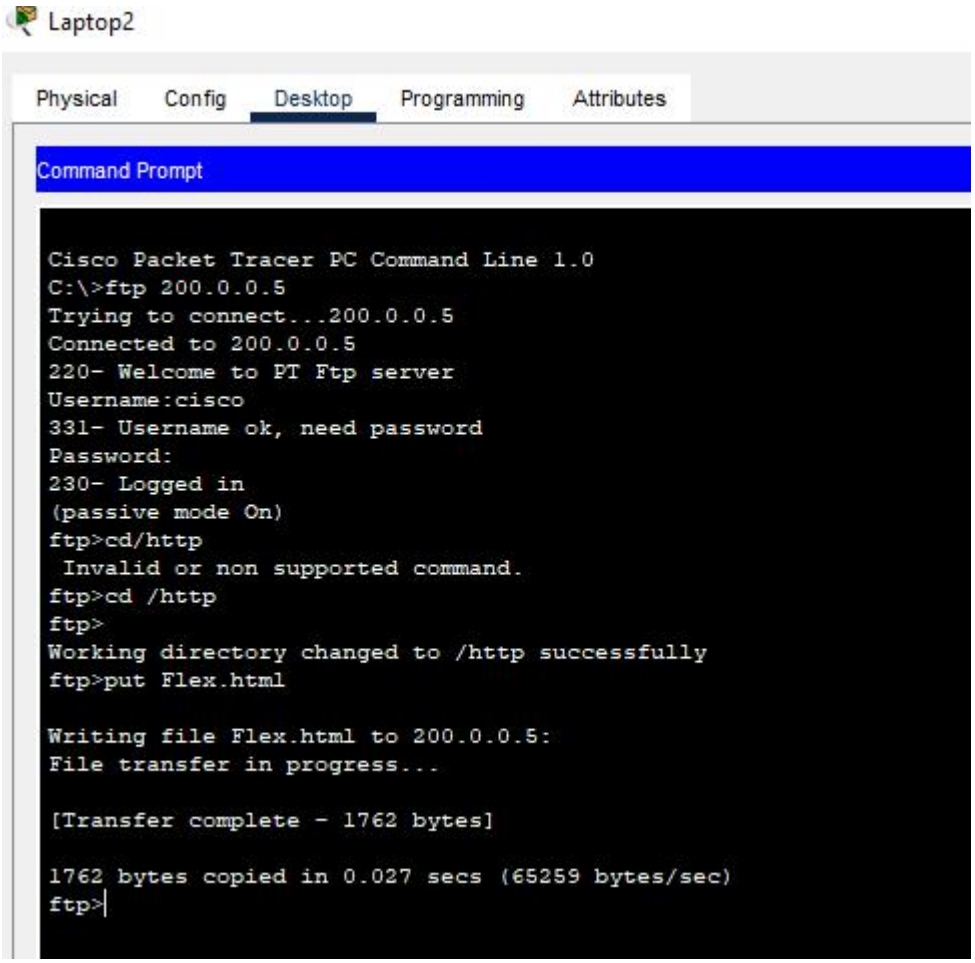


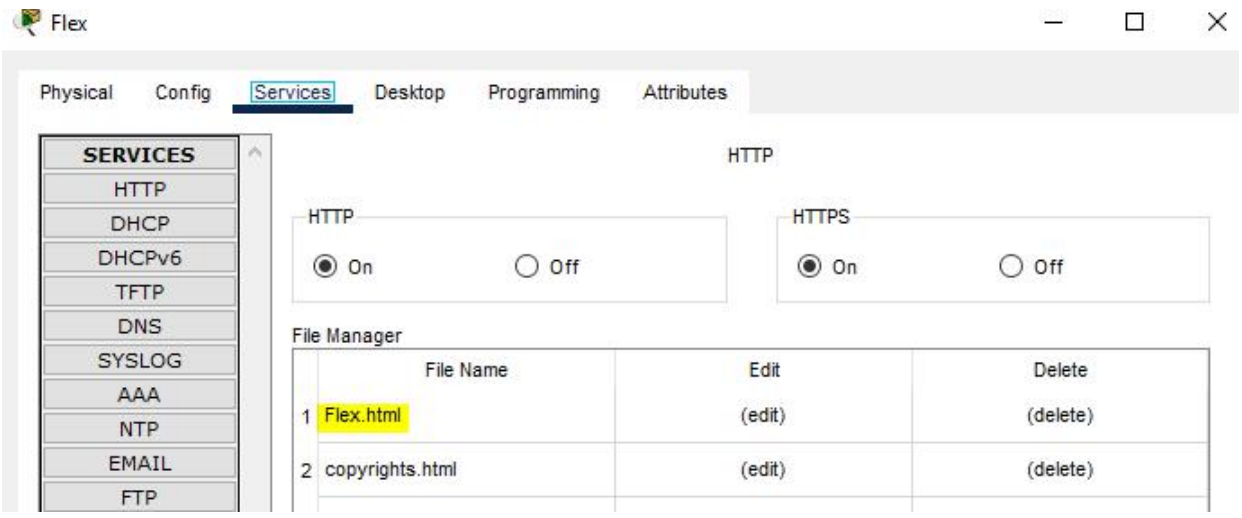


- Run ping 192.168.2.5 command.

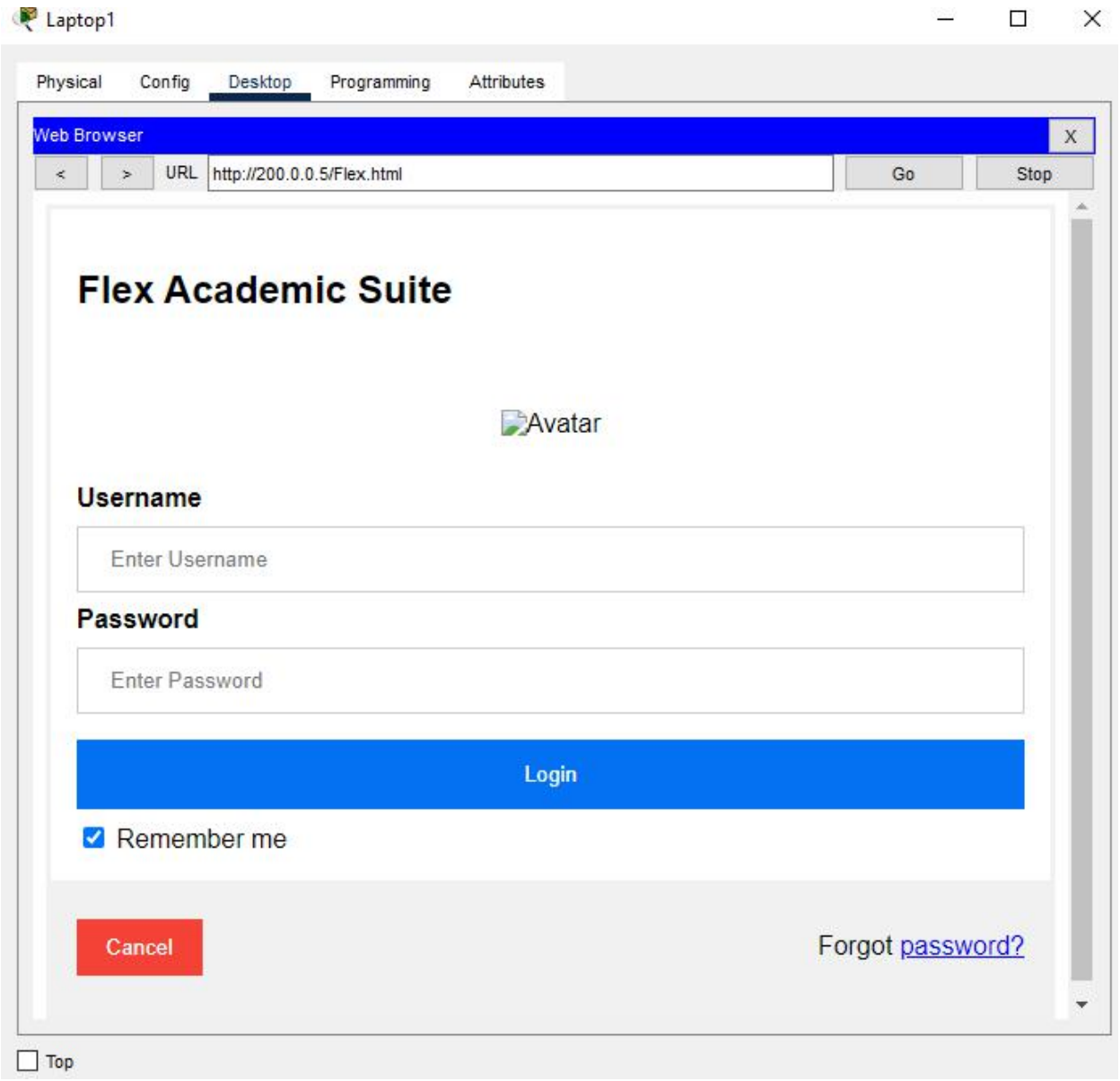
This Command gives the error “Destination Host Unieachable” because we aie tiying to access a iemote device on its local IP addiess which is not possible because we can access iemote devices only on their Public ip addresses.

Creating File & putting it on Flex Server.





Doing the last testing. Click Laptop1 and click Desktop and click Web Biowsei and access 200.0.0.5.



Above figuie confiims that host 192.168.1.10 is able to access the 200.0.0.5.