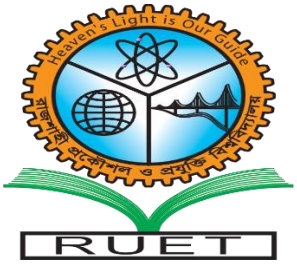
Heaven's Light is Our Guide



Computer Science And Engineering

Rajshahi University of Engineering and Technology

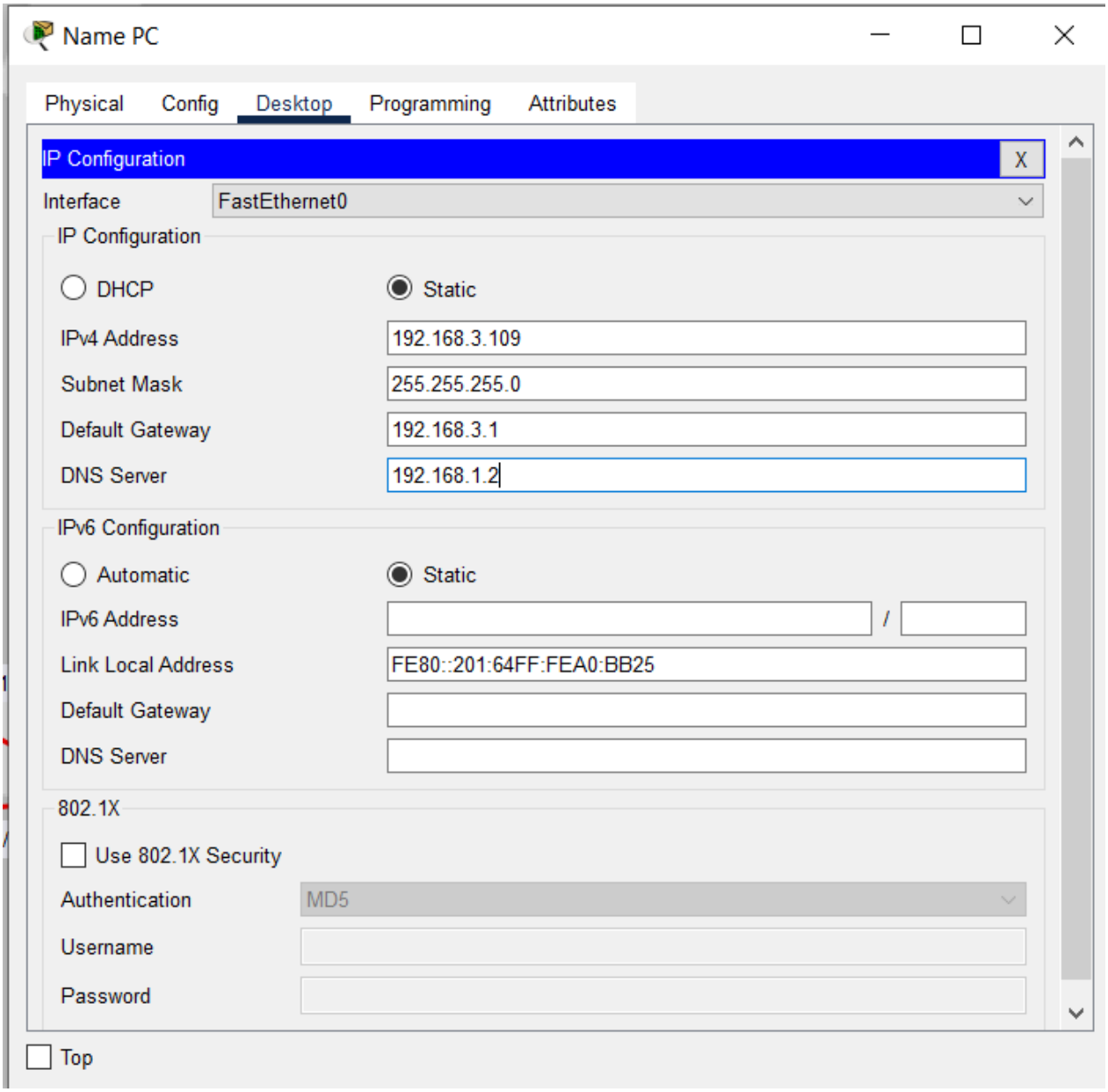
Course No: CSE3206

Course Title: Computer Network

Date of Submission: 17-12-22

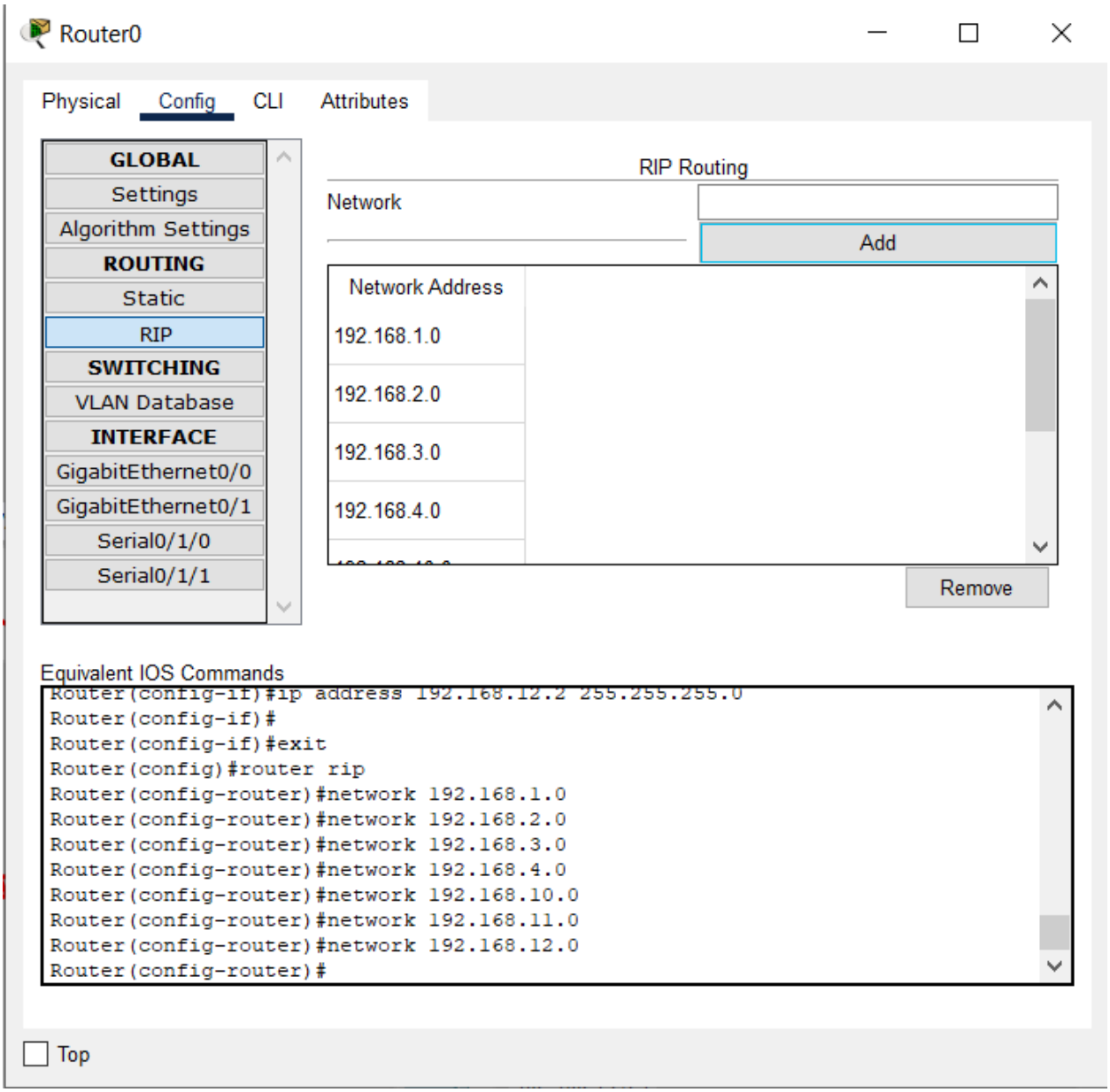
Submitted To	Submitted By
Tasmia Jannat Lecturer, Department Of Computer Science And Engineering Rajshahi University Of Engineering And Technology	Nazmul Haque Roll: 1803109 Section: B Department Of Computer Science And Engineering Rajshahi University Of Engineering And Technology

1. **last octate of the IP address of “Name PC” is the last 3 digits of my roll number (Static Host)**

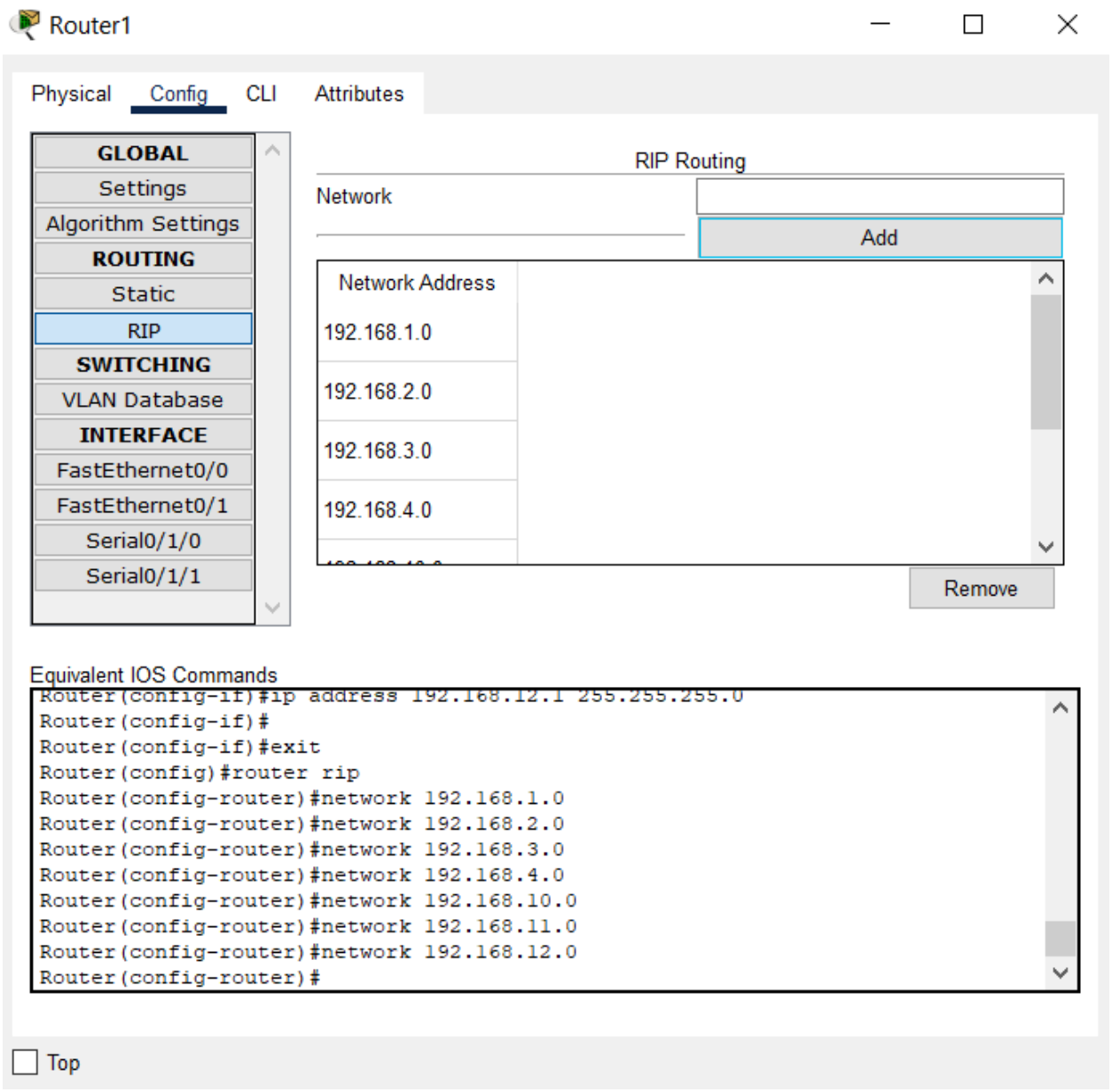


2. Use Dynamic Routing for the connection:

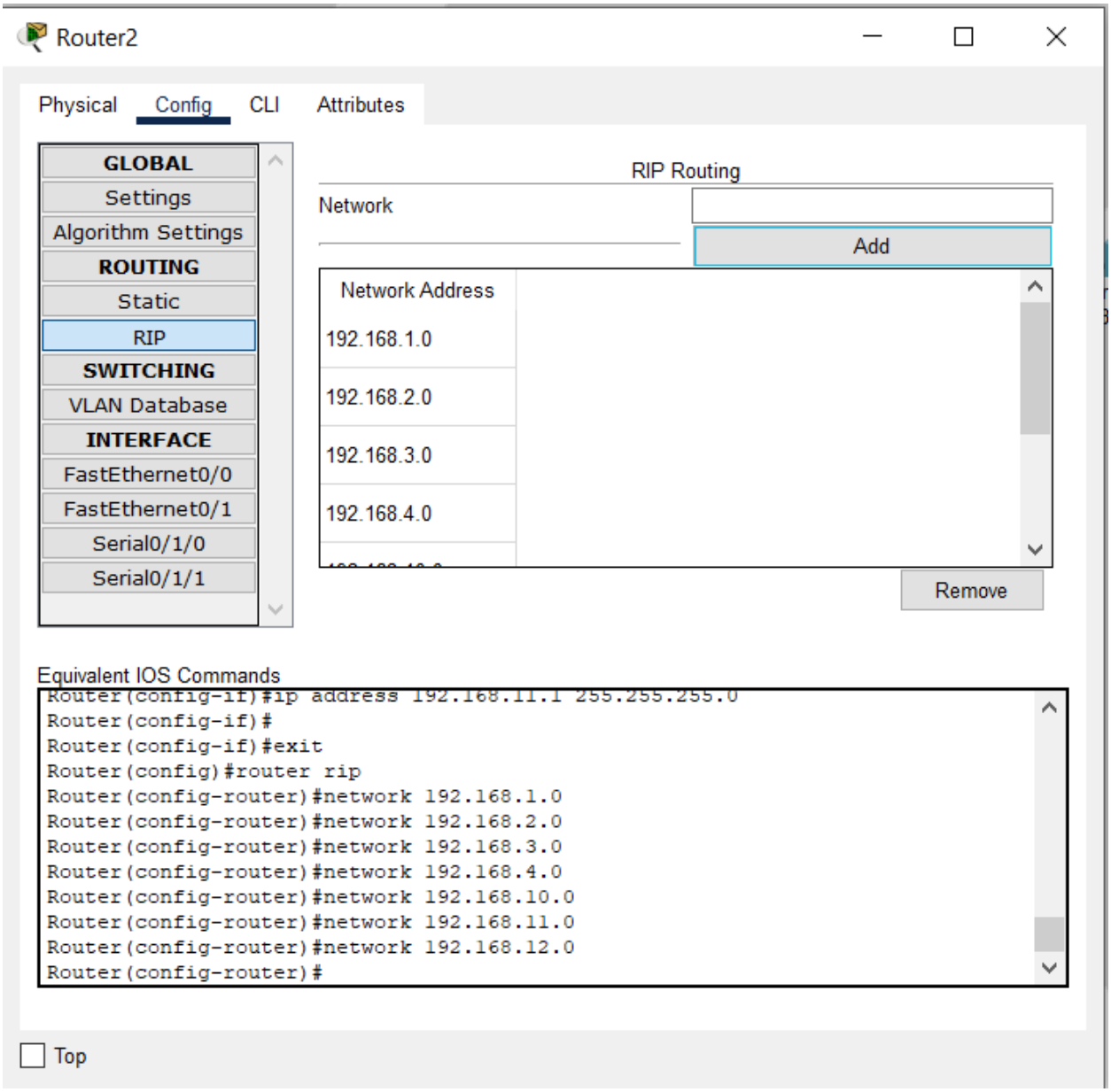
Router0:



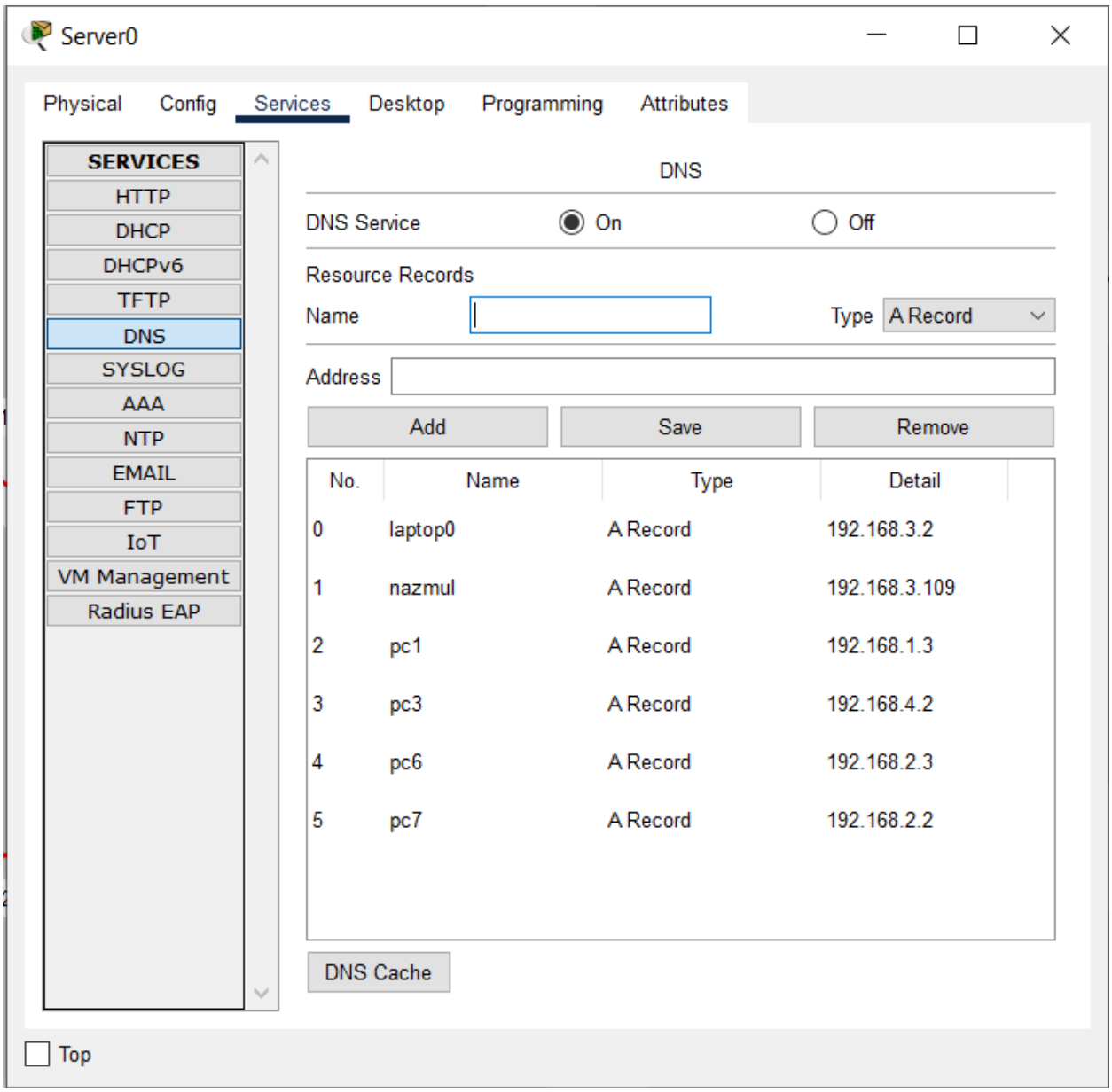
Router1:


Router1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/0
FastEthernet0/1
Serial0/1/0
Serial0/1/1
RIP Routing
Network
Add
Network Address
192.168.1.0
192.168.2.0
192.168.3.0
192.168.4.0
Remove
Equivalent IOS Commands
Router(config-if)#ip address 192.168.12.1 255.255.255.0
Router(config-if)#
Router(config-if)#exit
Router(config)#router rip
Router(config-router)#network 192.168.1.0
Router(config-router)#network 192.168.2.0
Router(config-router)#network 192.168.3.0
Router(config-router)#network 192.168.4.0
Router(config-router)#network 192.168.10.0
Router(config-router)#network 192.168.11.0
Router(config-router)#network 192.168.12.0
Router(config-router)#
Top

Router2:


Router2
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/0
FastEthernet0/1
Serial0/1/0
Serial0/1/1
RIP Routing
Network
Add
Network Address
192.168.1.0
192.168.2.0
192.168.3.0
192.168.4.0
Remove
Equivalent IOS Commands
Router(config-if)#ip address 192.168.11.1 255.255.255.0
Router(config-if)#
Router(config-if)#exit
Router(config)#router rip
Router(config-router)#network 192.168.1.0
Router(config-router)#network 192.168.2.0
Router(config-router)#network 192.168.3.0
Router(config-router)#network 192.168.4.0
Router(config-router)#network 192.168.10.0
Router(config-router)#network 192.168.11.0
Router(config-router)#network 192.168.12.0
Router(config-router)#
Top

3.Assign the DNS name to “Name PC” as my Name.



i)Finding Nazmul pc from laptop0(DNS) :

```
C:\>ping nazmul

Pinging 192.168.3.109 with 32 bytes of data:

Reply from 192.168.3.109: bytes=32 time<1ms TTL=128
Reply from 192.168.3.109: bytes=32 time<1ms TTL=128
Reply from 192.168.3.109: bytes=32 time<1ms TTL=128
Reply from 192.168.3.109: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.3.109:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

ii) Finding nazmul pc from pc3(DNS) :

PC3

Physical Config Desktop Programming Attributes

Command Prompt X

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping nazmul

Pinging 192.168.3.109 with 32 bytes of data:

Reply from 192.168.3.109: bytes=32 time=2ms TTL=127
Reply from 192.168.3.109: bytes=32 time<1ms TTL=127
Reply from 192.168.3.109: bytes=32 time=16ms TTL=127
Reply from 192.168.3.109: bytes=32 time=25ms TTL=127

Ping statistics for 192.168.3.109:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 25ms, Average = 10ms

C:\>
```

4. Assign IP addresses to all the host by DHCP except “Name PC”.

Router0:

```
% Ambiguous command: "en"
Router(config)#config terminal
%Invalid hex value
Router(config)#int gig0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#exit
```

Router0(gig0/0):

```
Router(config)#int gig0/0
Router(config-if)#ip dhcp pool left
Router(dhcp-config)#default-router 192.168.1.1
Router(dhcp-config)#network 192.168.1.0 255.255.255.0
Router(dhcp-config)#no shutdown
                    ^
% Invalid input detected at '^' marker.

Router(dhcp-config)#exit
```

Router1(Fa0/0):

```
Router>en
Router#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int Fa0/0
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#
```

```
Router>en
Router#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int Fa0/0
Router(config-if)#ip address 192.168.2.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#ip dhcp pool up
Router(dhcp-config)#default-router 192.168.2.1
Router(dhcp-config)#network 192.168.2.0 255.255.255.0
Router(dhcp-config)#no shutdown
                    ^
% Invalid input detected at '^' marker.

Router(dhcp-config)#exit
Router(config)#
```

For generating ip for different network from server:

```
Router(config)#int Fa0/0
Router(config-if)#ip helper-address 192.168.1.2
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#
```

Router2(Fa0/1):

```
Router>en
Router#config terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int Fa0/1
Router(config-if)#ip address 192.168.3.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#
```

```
Router(config)#ip dhcp pool right
Router(dhcp-config)#default-router 192.168.3.1
Router(dhcp-config)#network 192.168.3.0 255.255.255.0
Router(dhcp-config)#dns-server 192.168.1.2
Router(dhcp-config)#no shutdown
                    ^
% Invalid input detected at '^' marker.

Router(dhcp-config)#exit
Router(config)#
```

Router2(Fa0/0):

```
Router(config)#int Fa0/0
Router(config-if)#ip address 192.168.4.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#exit
```

```
Router(config)#ip dhcp pool down
Router(dhcp-config)#default-router 192.168.4.1
Router(dhcp-config)#network 192.168.4.0 255.255.255.0
Router(dhcp-config)#dns-server 192.168.1.2
Router(dhcp-config)#no shutdown
                        ^
% Invalid input detected at '^' marker.

Router(dhcp-config)#exit
Router(config)#
```

Discussion: All connections work successfully. I attached that screenshot below: