



Internet & Intranet Architecture
Summer – 2022

CID - 109969

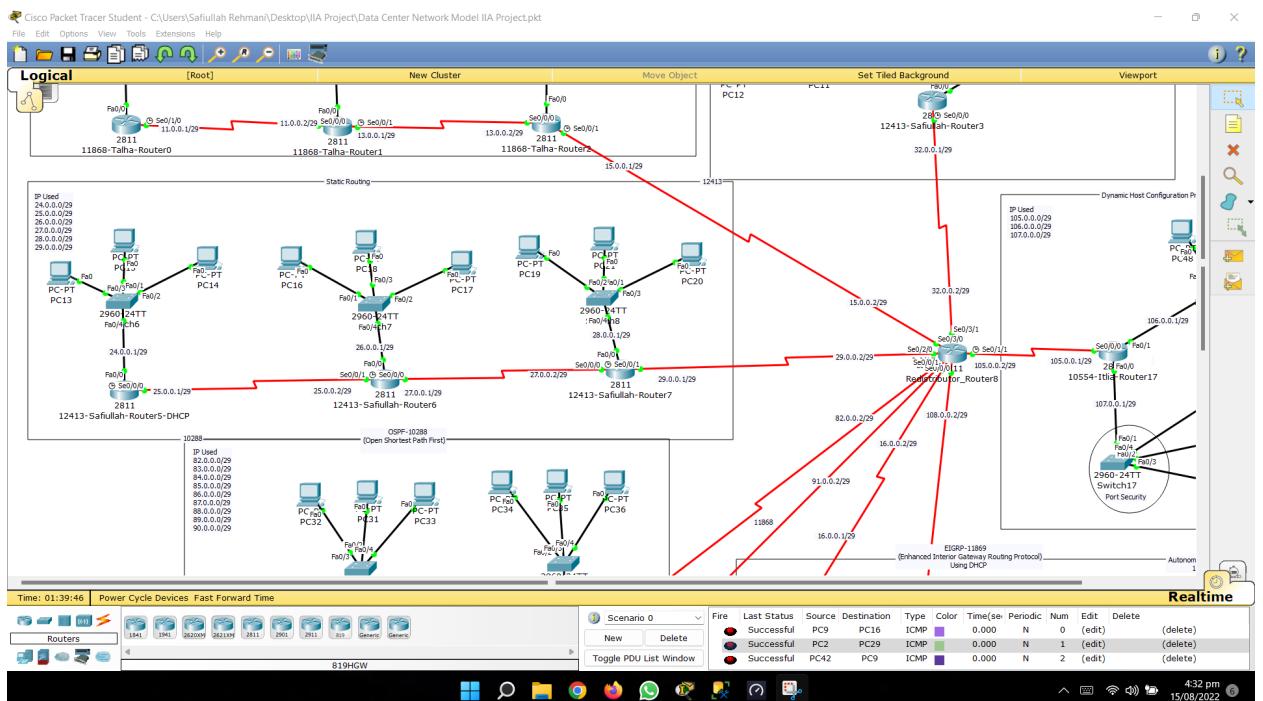
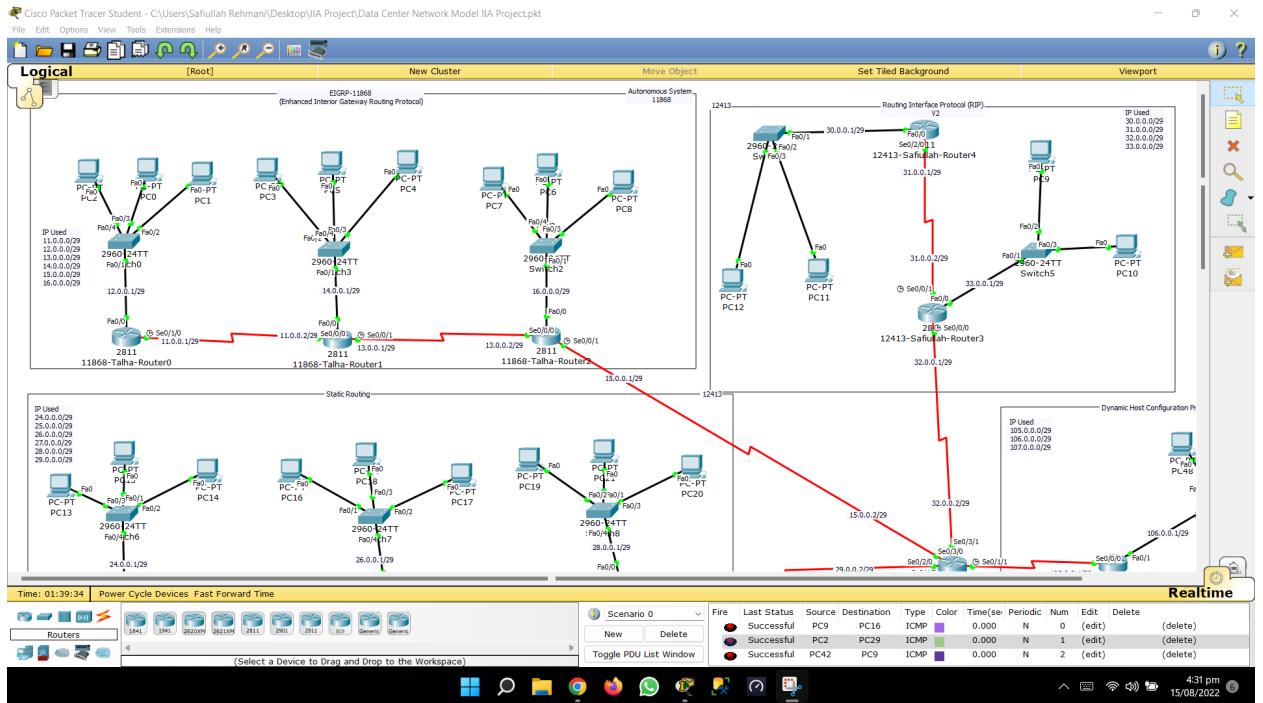
Project Report

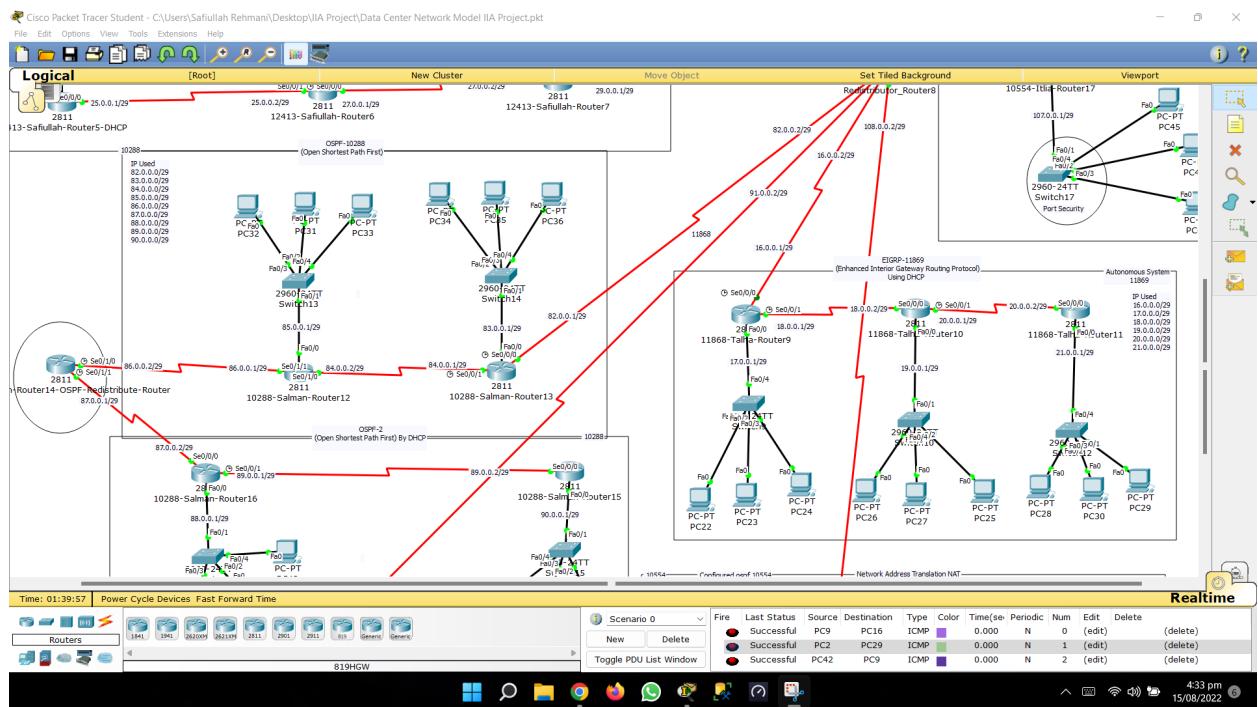
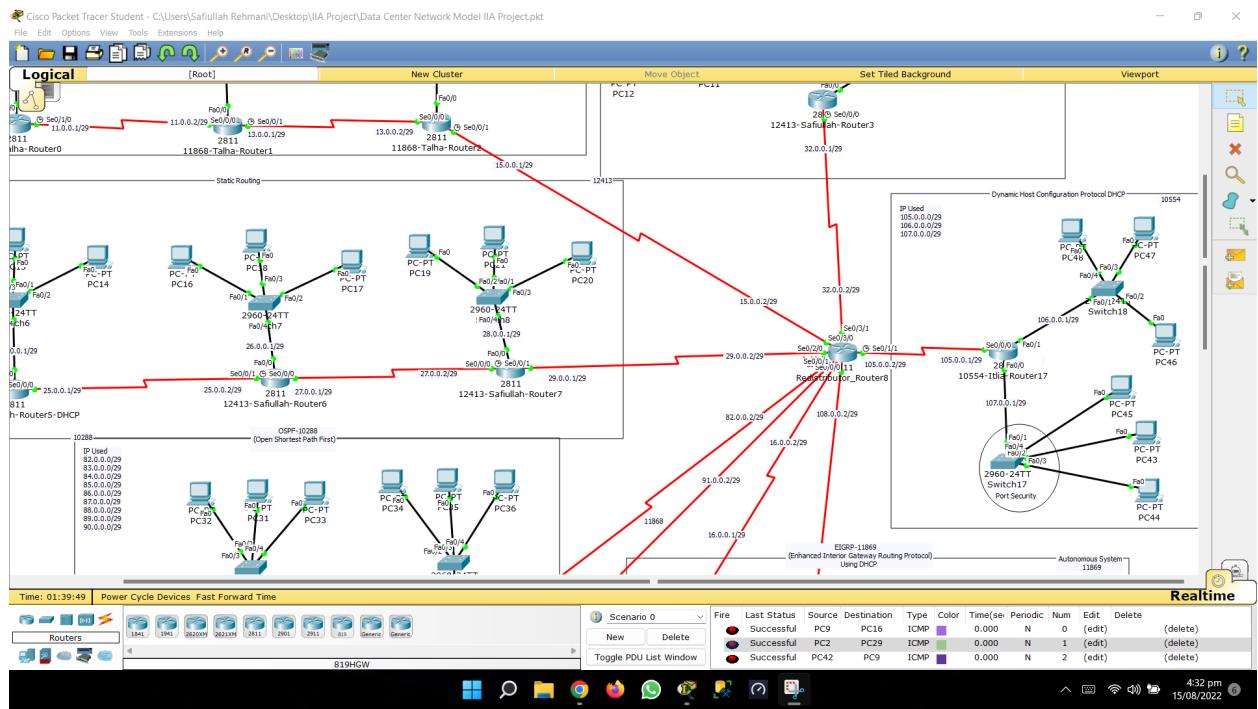
[Data Center Network Model]

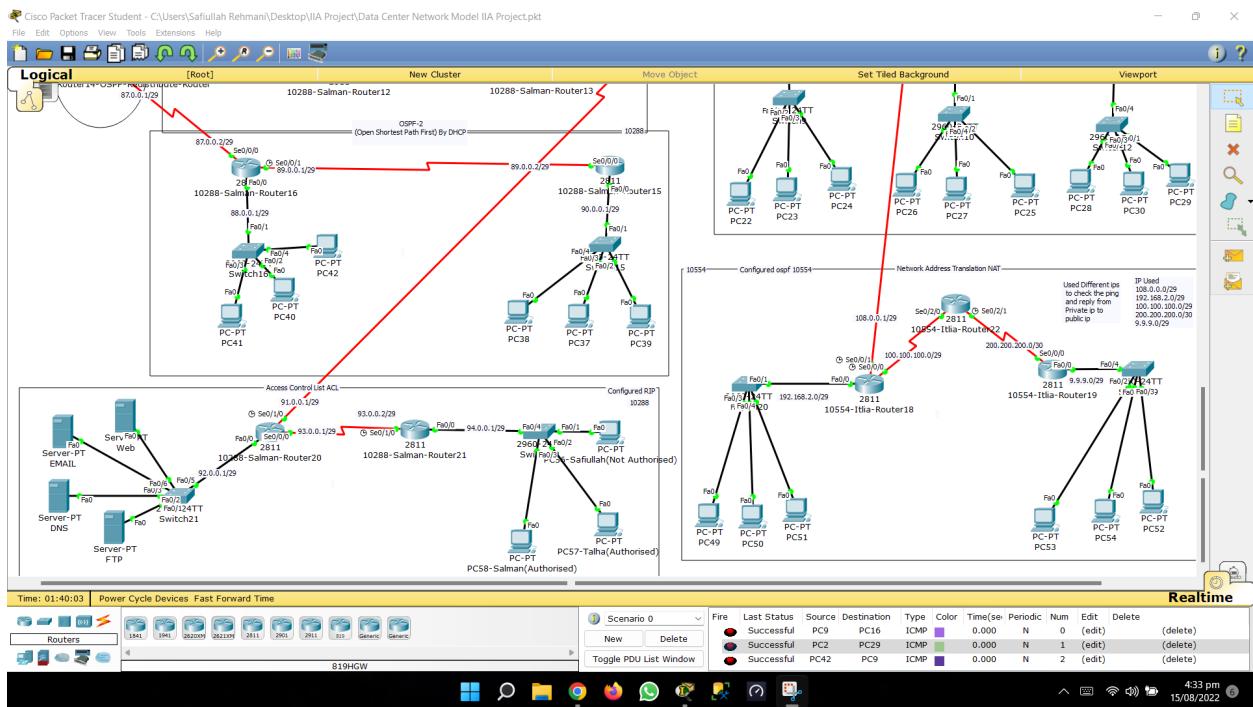
[Project Group Members]

- 1. (12413) Safiullah Rehmani*
- 2. (11868) Talha Shakeel*
- 3. (10288) Salman Saeed*
- 4. (10554) Itlia Ubana*

Network Diagram:-



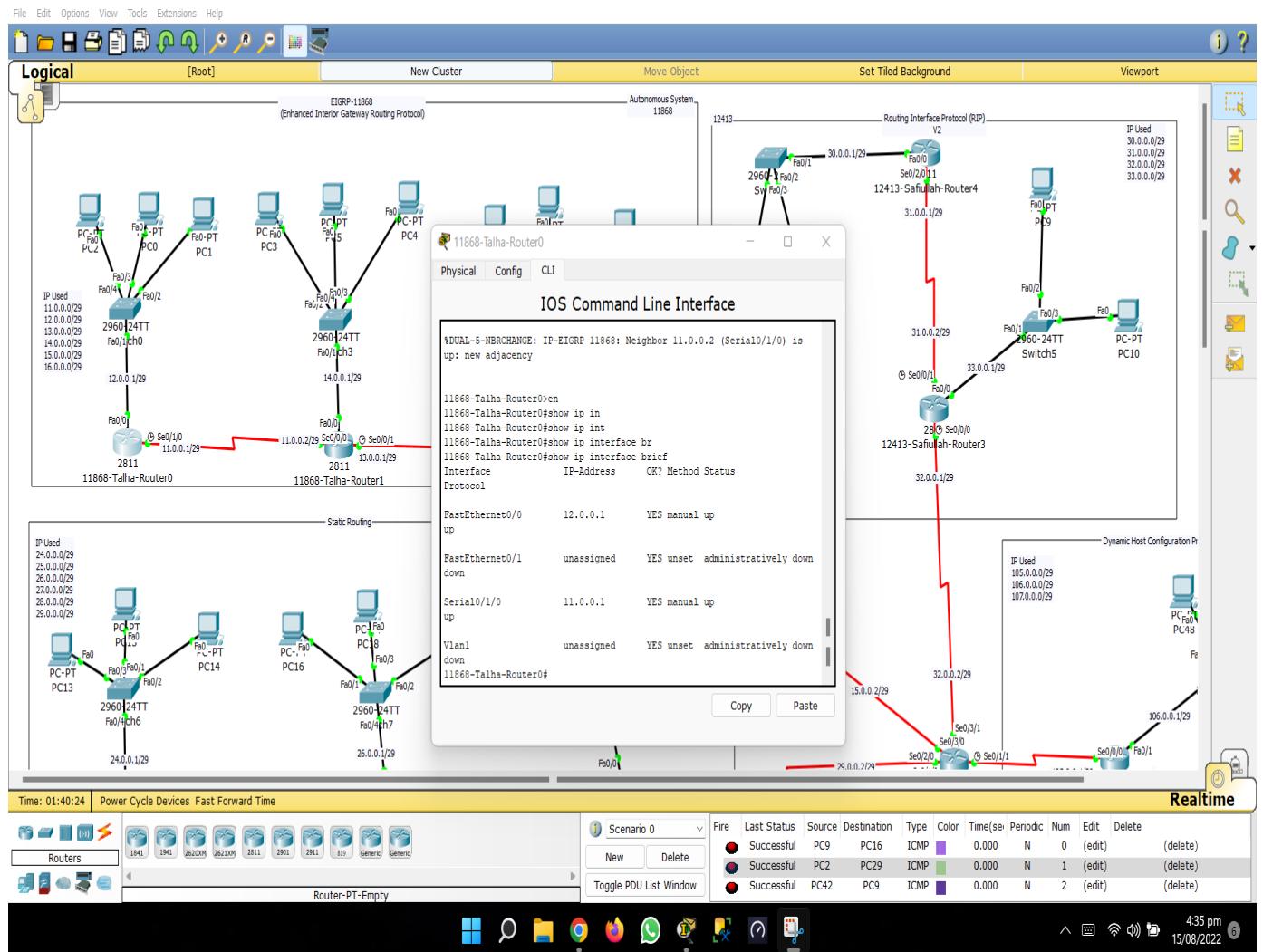




EIGRP-11868 Router 0:-

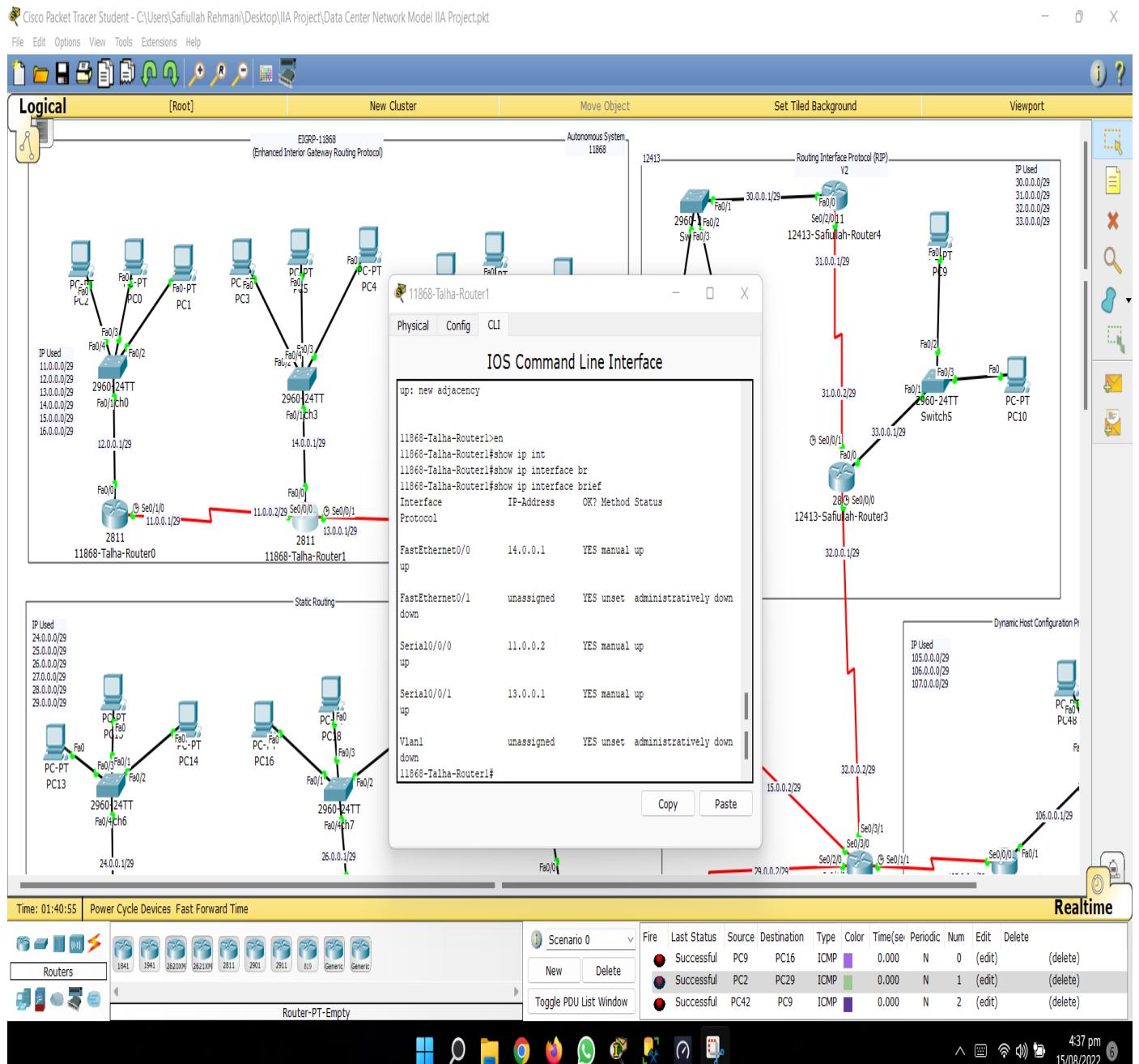
Show IP Interface Brief:-

Cisco Packet Tracer Student - C:\Users\Safiullah Rehmani\Desktop\IIA Project\Data Center Network Model IIA Project.pkt



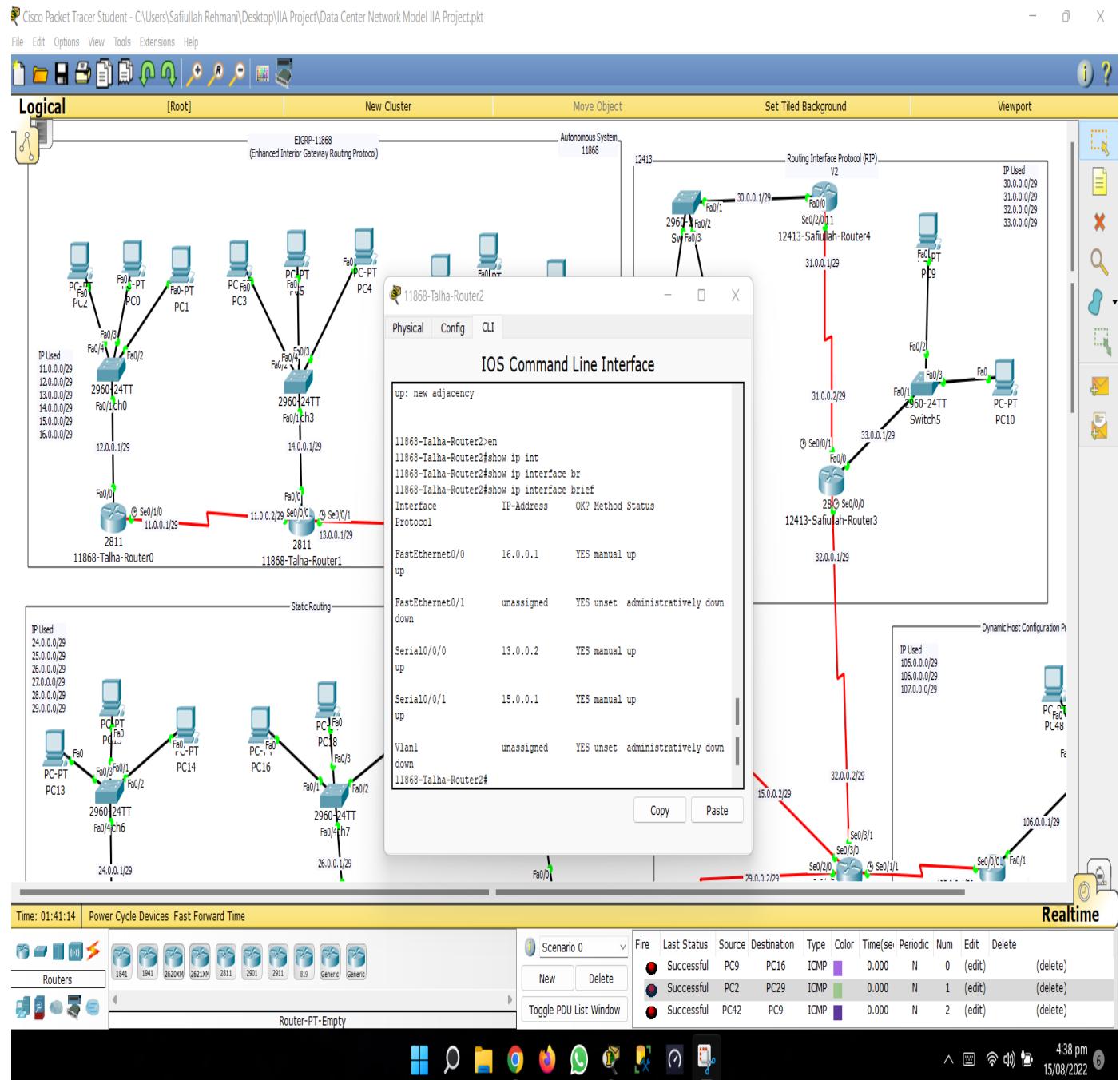
EIGRP-11868 Router 1:-

Show IP Interface Brief:-



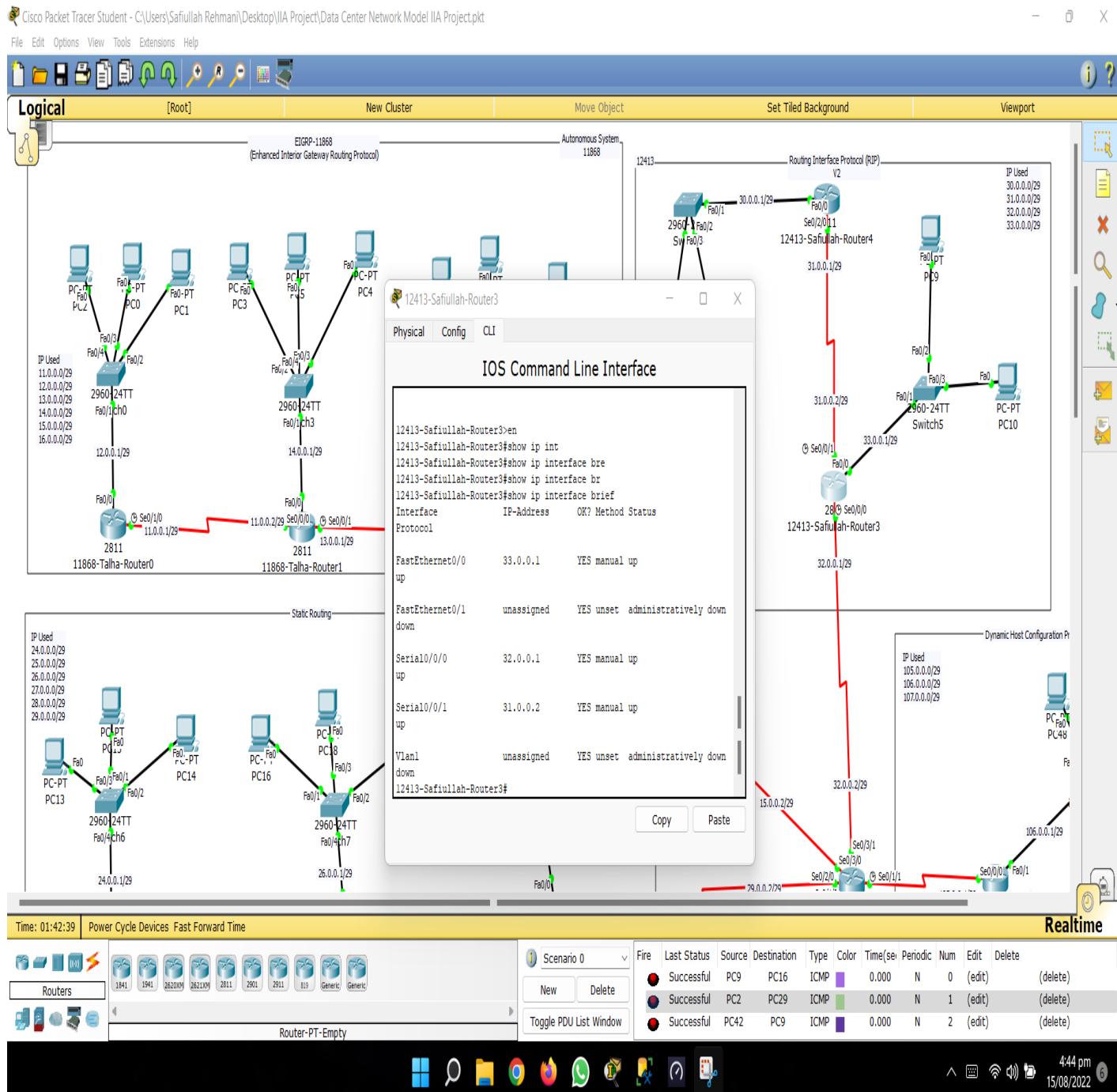
EIGRP-11868 Router 2:-

Show IP Interface Brief:-



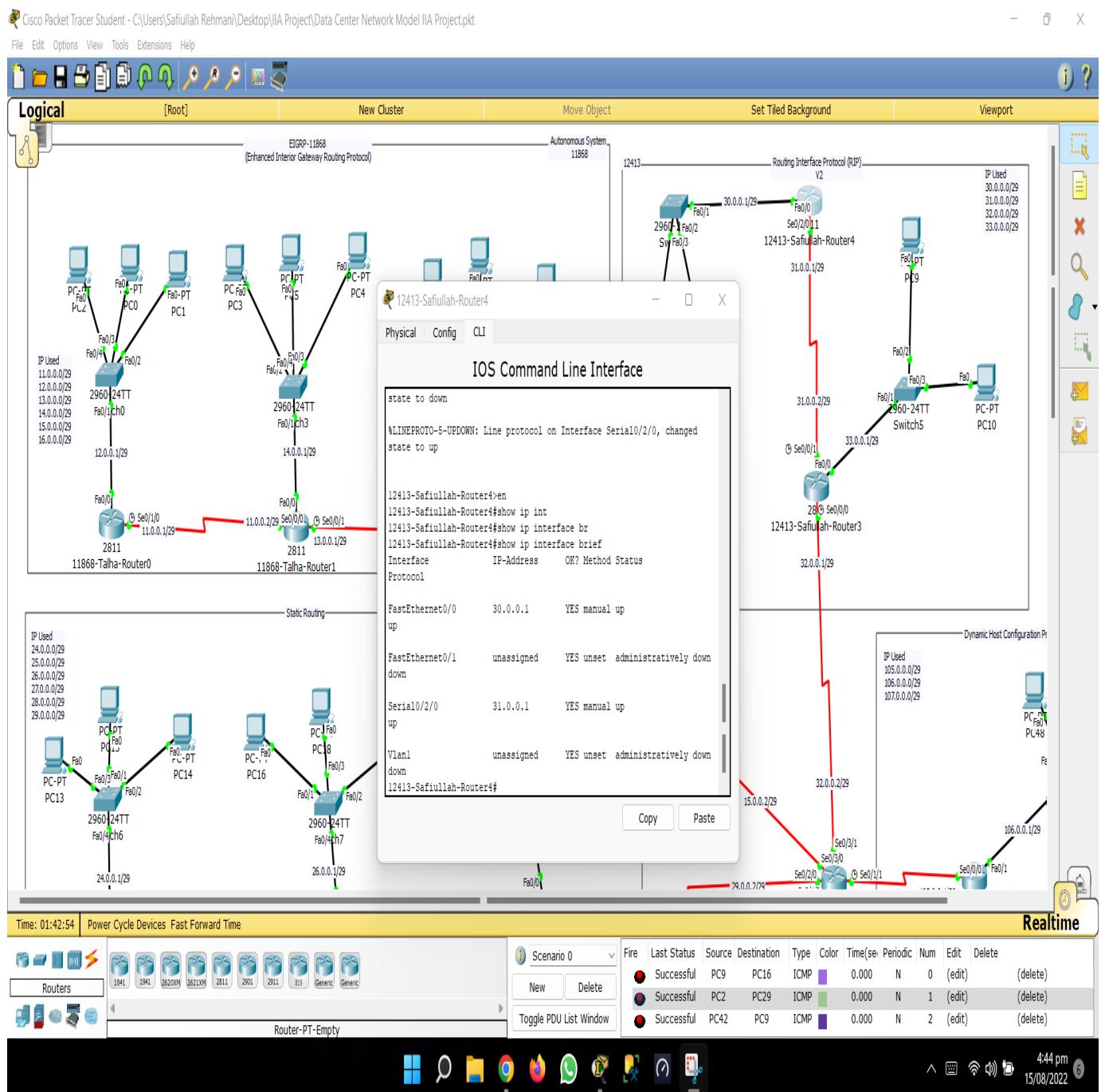
RIP-V2 Router 3:-

Show IP Interface Brief:-



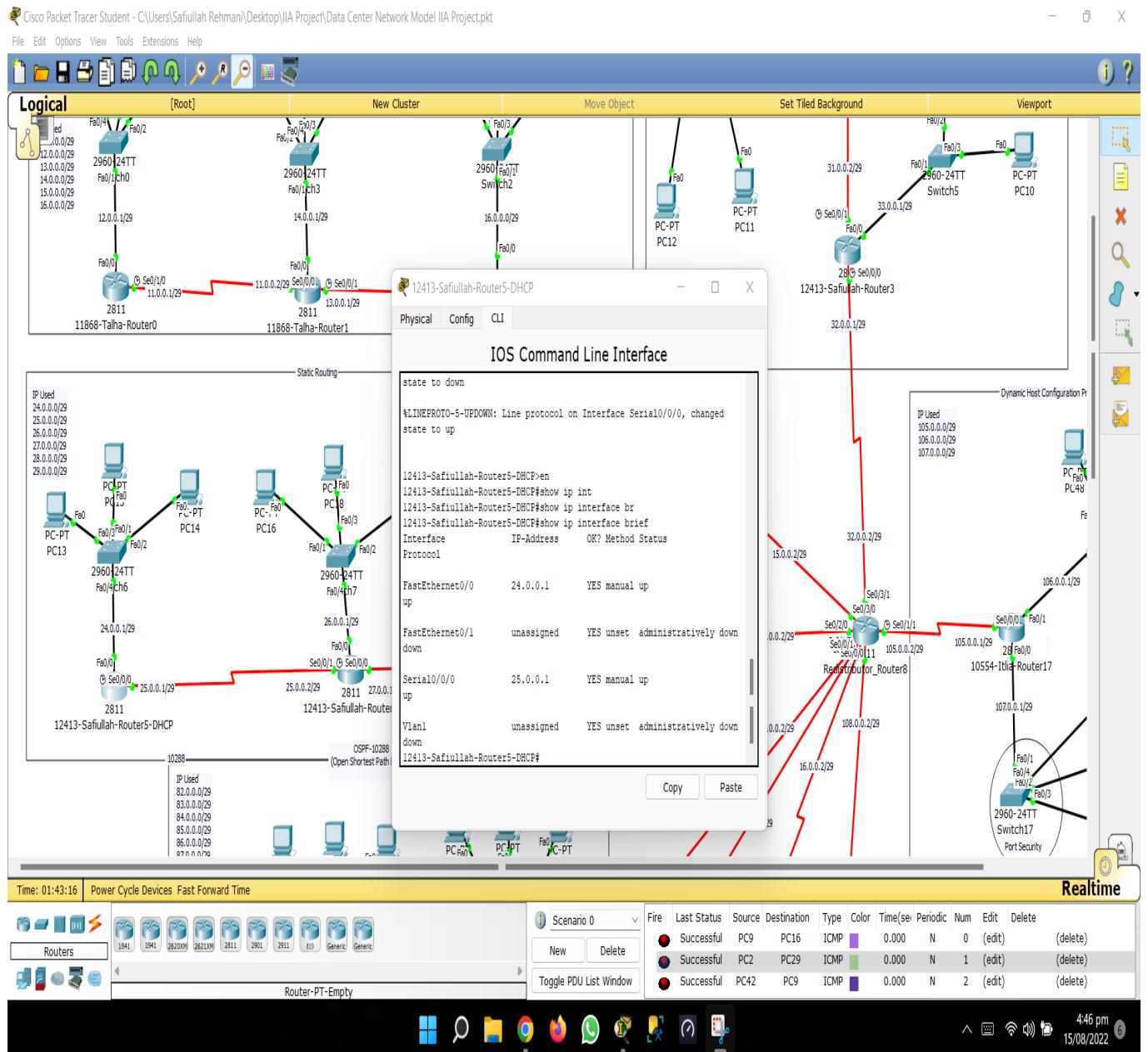
RIP-V2 Router 4:-

Show IP Interface Brief:-



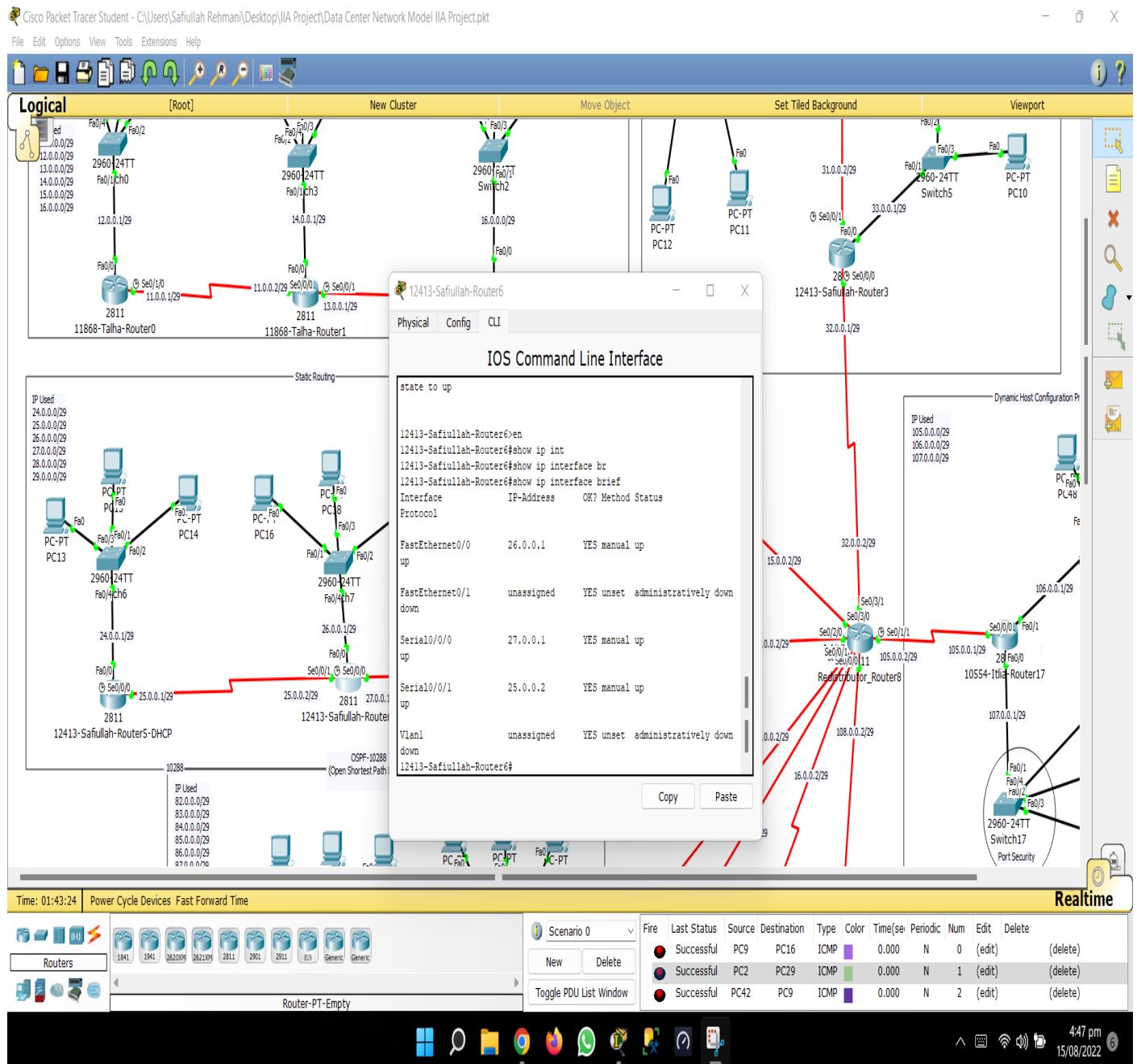
Static Router 5:-

Show IP Interface Brief:-



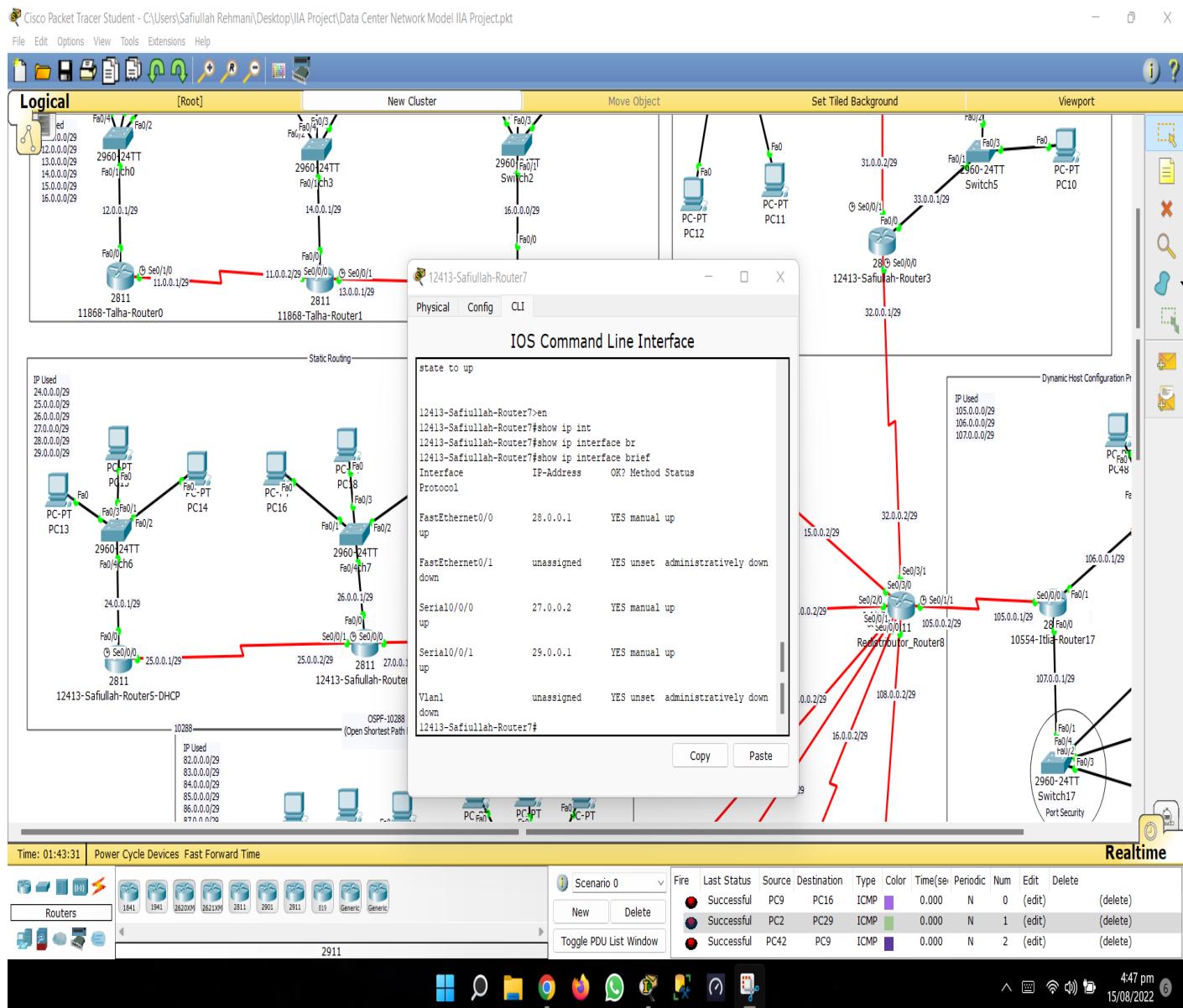
Static Router 6:-

Show IP Interface Brief:-



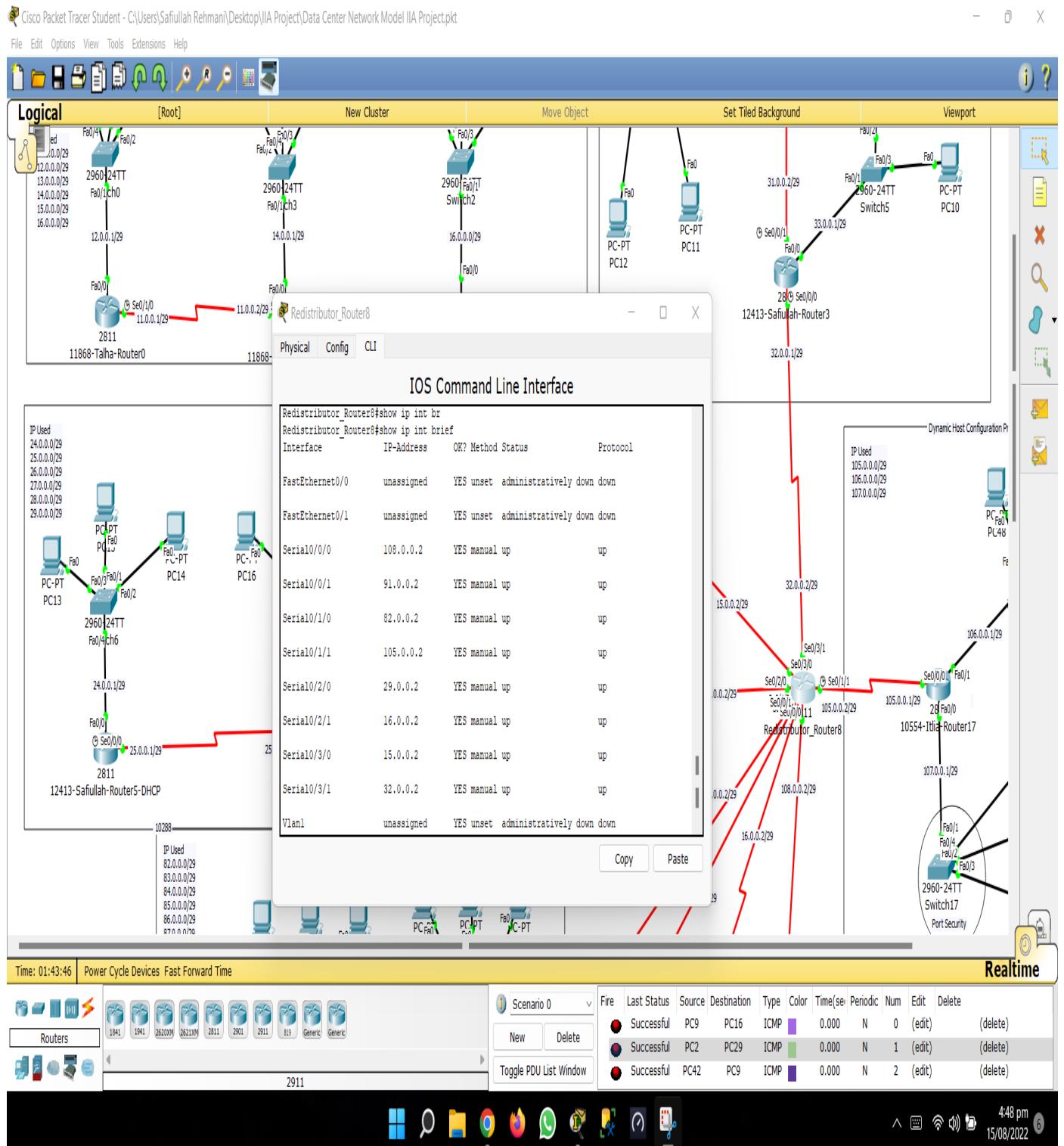
Static Router 7:-

Show IP Interface Brief:-



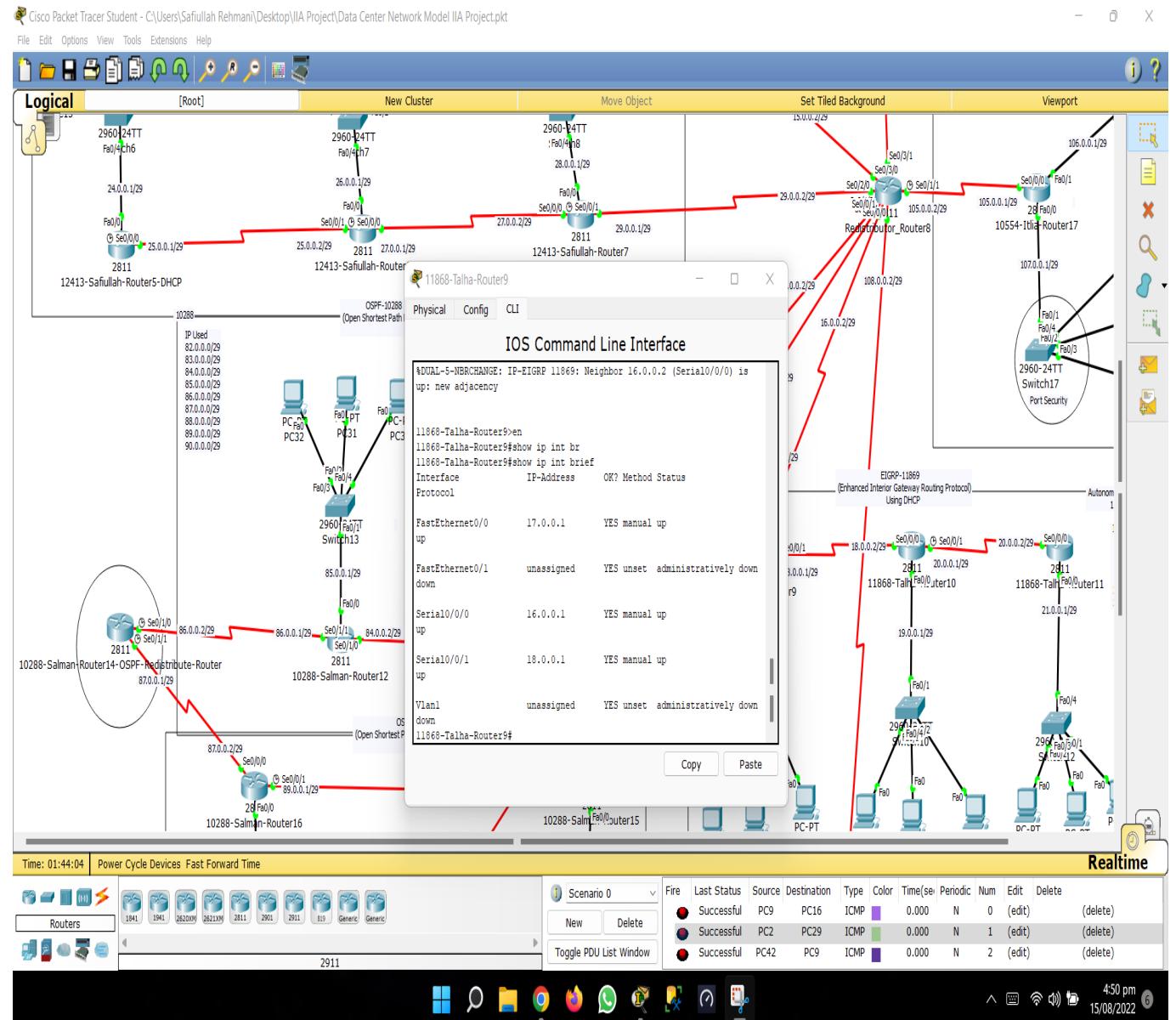
Main Redistributor Router 8:-

Show IP Interface Brief:-



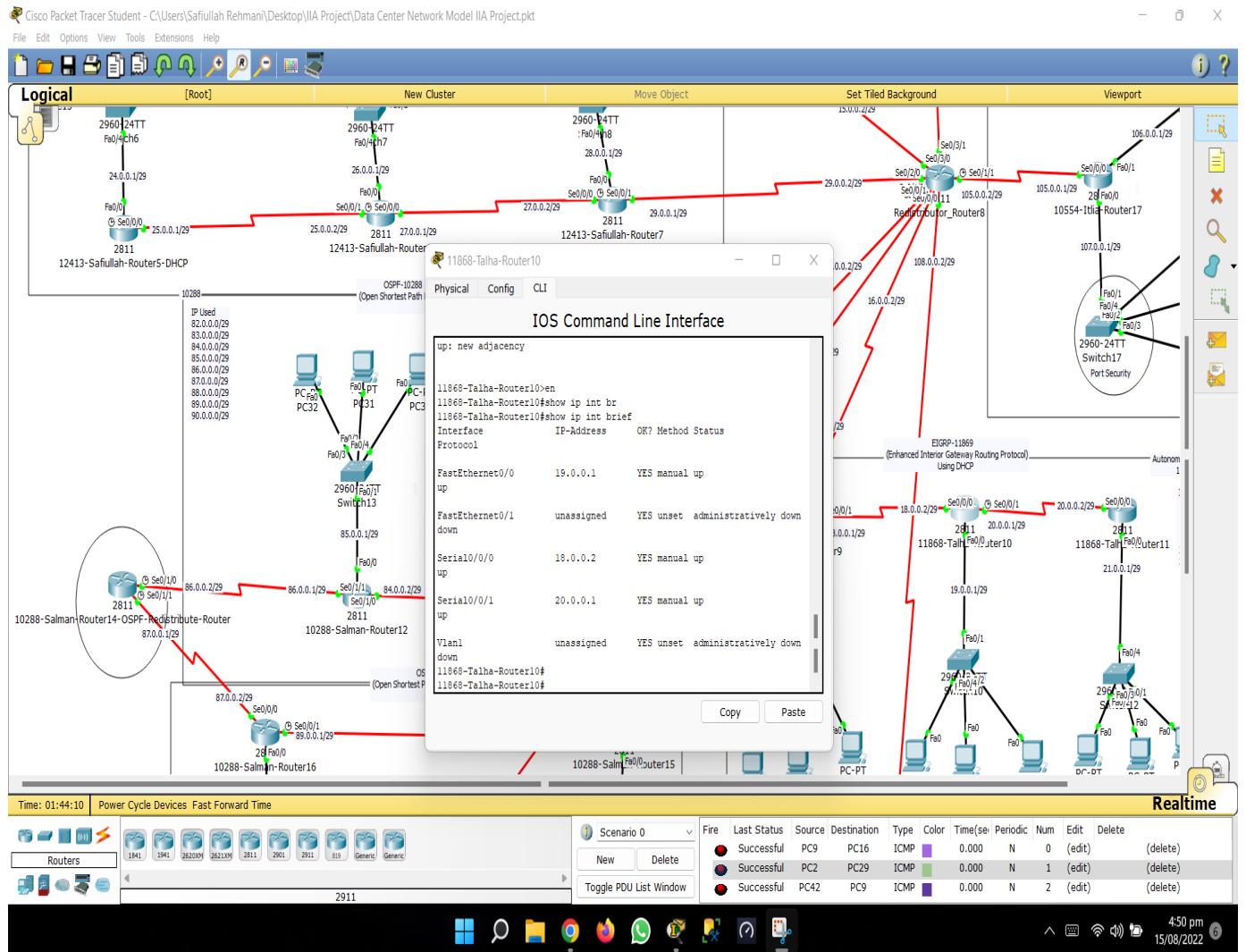
EIGRP-11869 By DHCP Router 9:-

Show IP Interface Brief:-



EIGRP-11869 By DHCP Router 10:-

Show IP Interface Brief:-

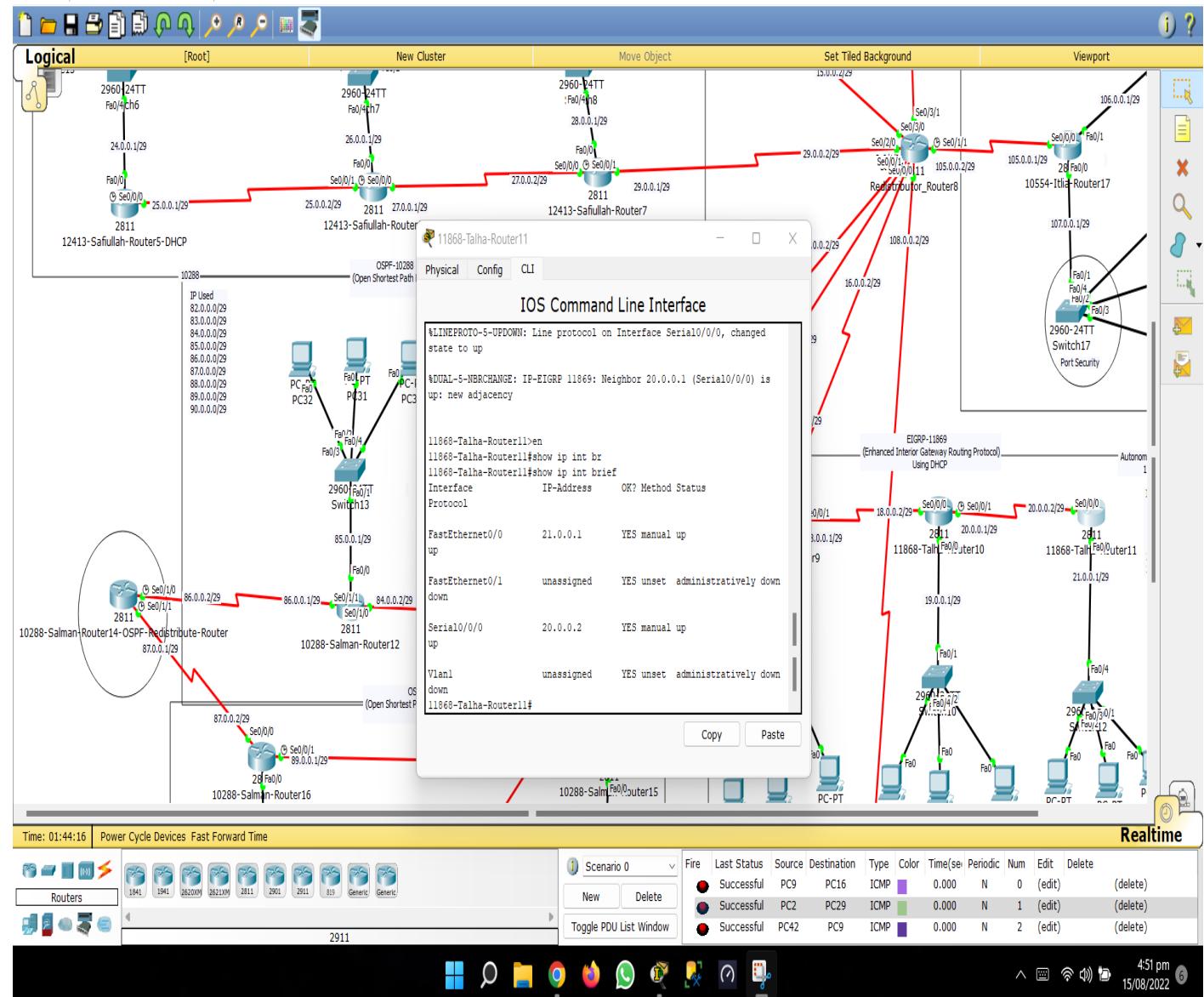


EIGRP-11869 By DHCP Router 11:-

Show IP Interface Brief:-

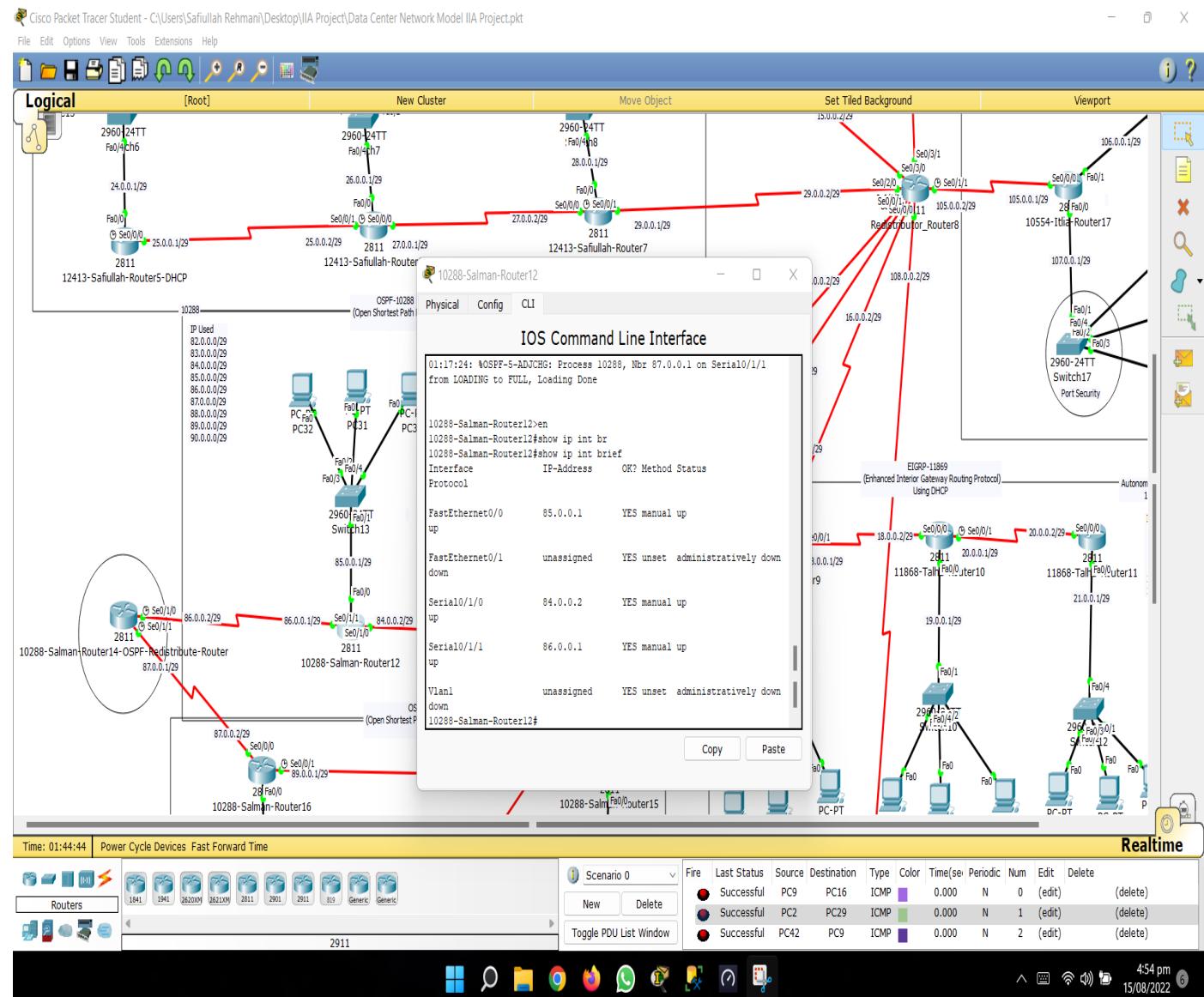
Cisco Packet Tracer Student - C:\Users\Safiuallah Rehmani\Desktop\IIA Project\Data Center Network Model IIA Project.pkt

File Edit Options View Tools Extensions Help



OSPF-10288 Router 12:-

Show IP Interface Brief:-

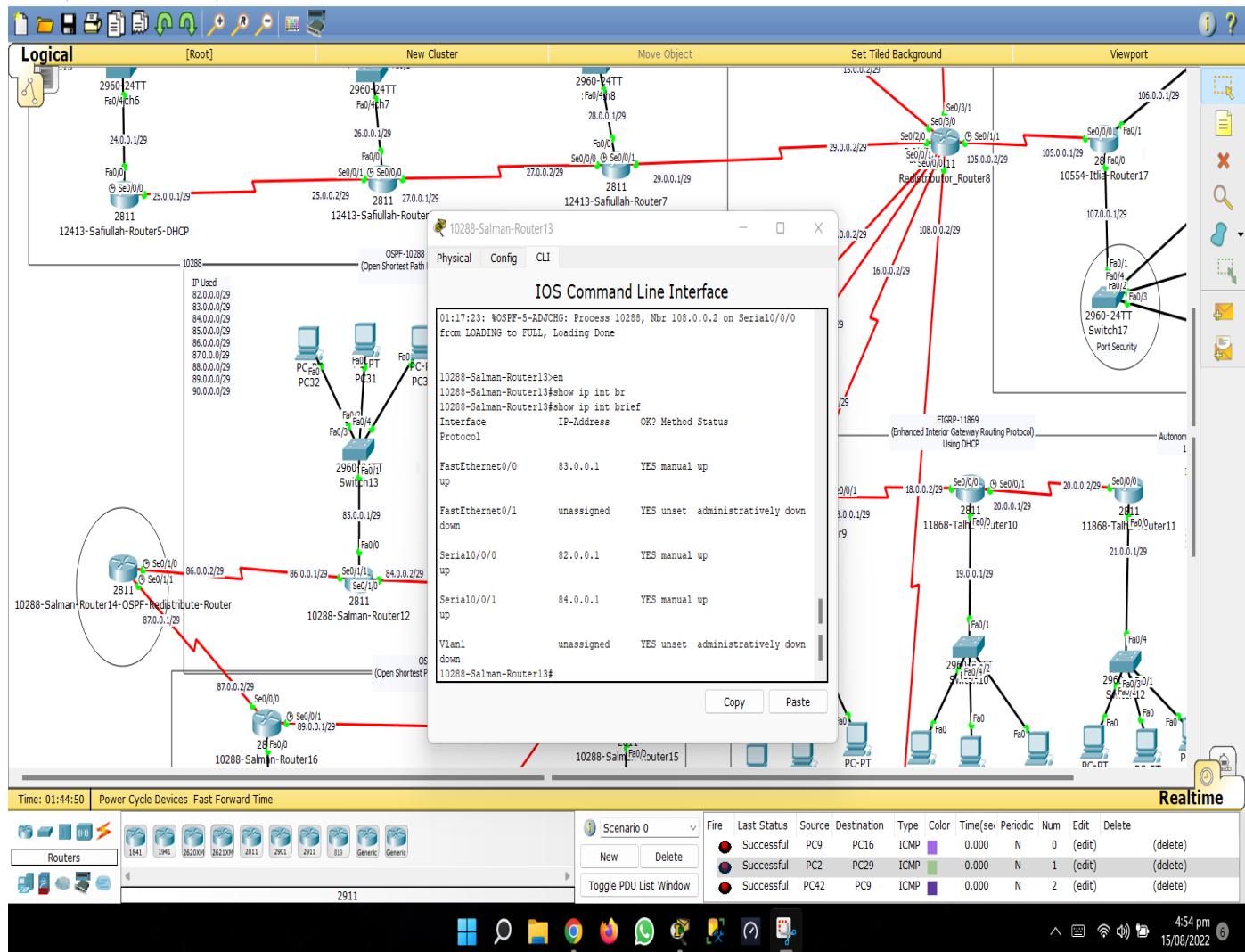


OSPF-10288 Router 13:-

Show IP Interface Brief:-

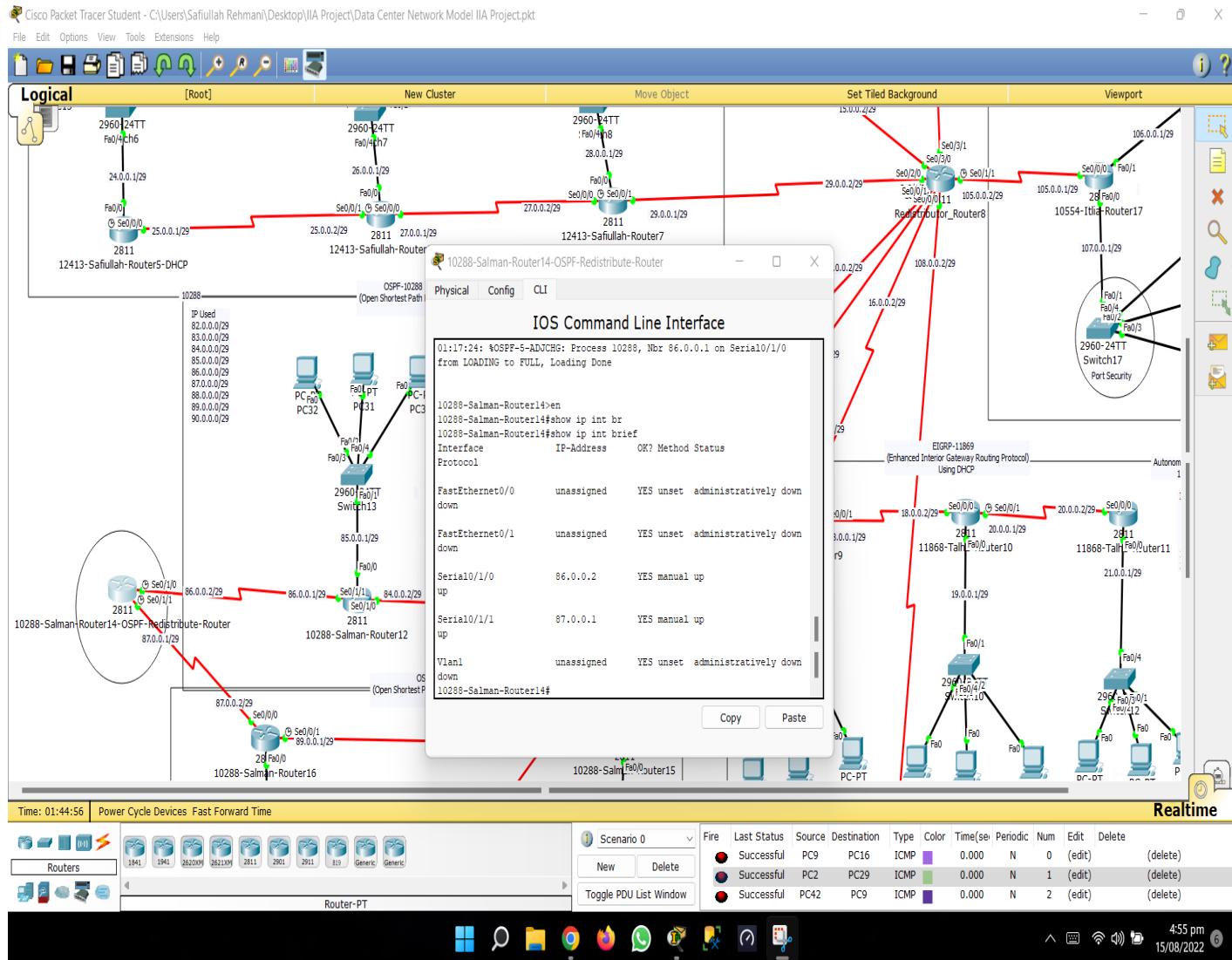
Cisco Packet Tracer Student - C:\Users\Safiullah Rehman\Desktop\IIA Project\Data Center Network Model IIA Project.pkt

File Edit Options View Tools Extensions Help



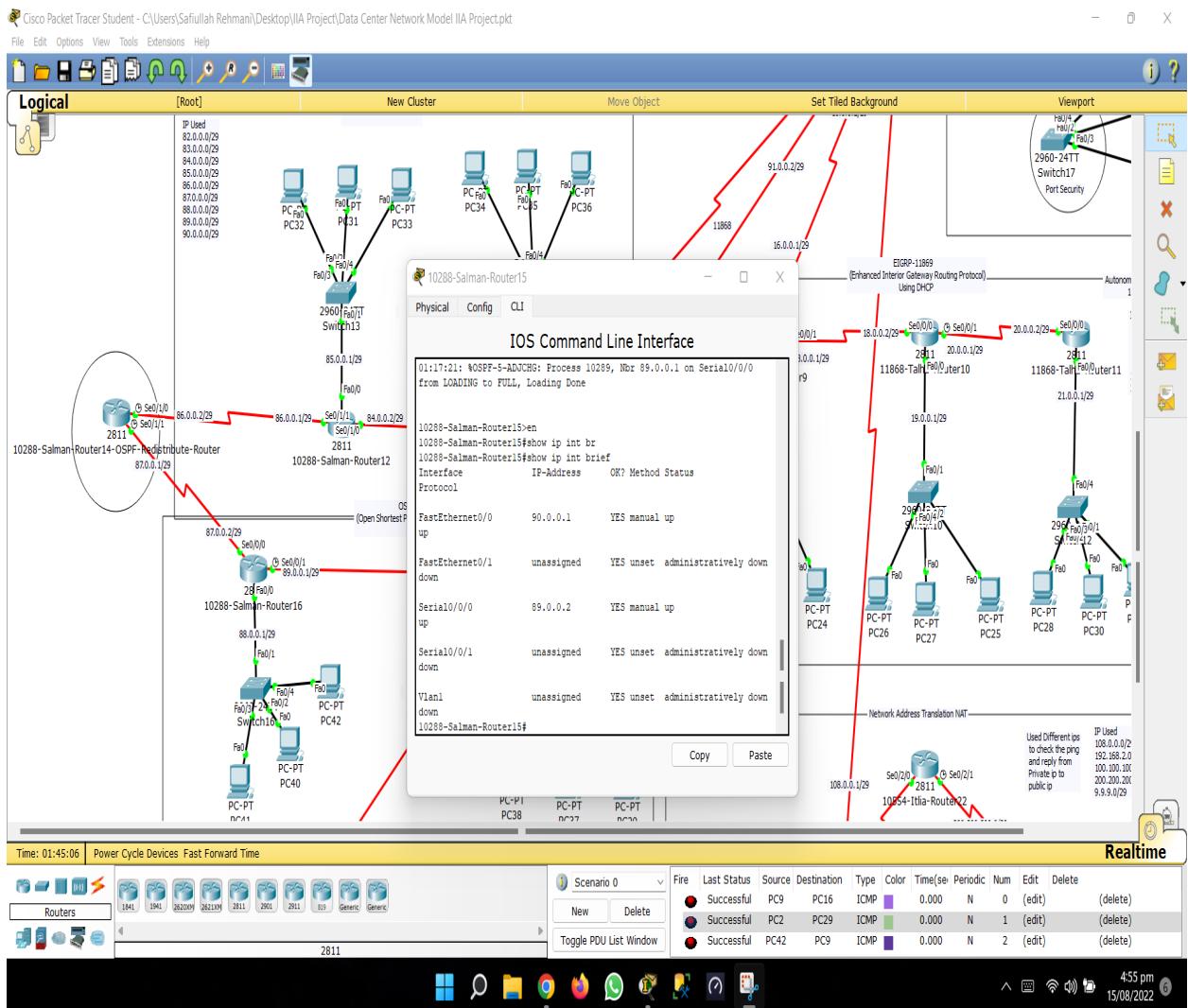
OSPF-10288 Router 14 Redistribute Router for OSPF:-

Show IP Interface Brief:-



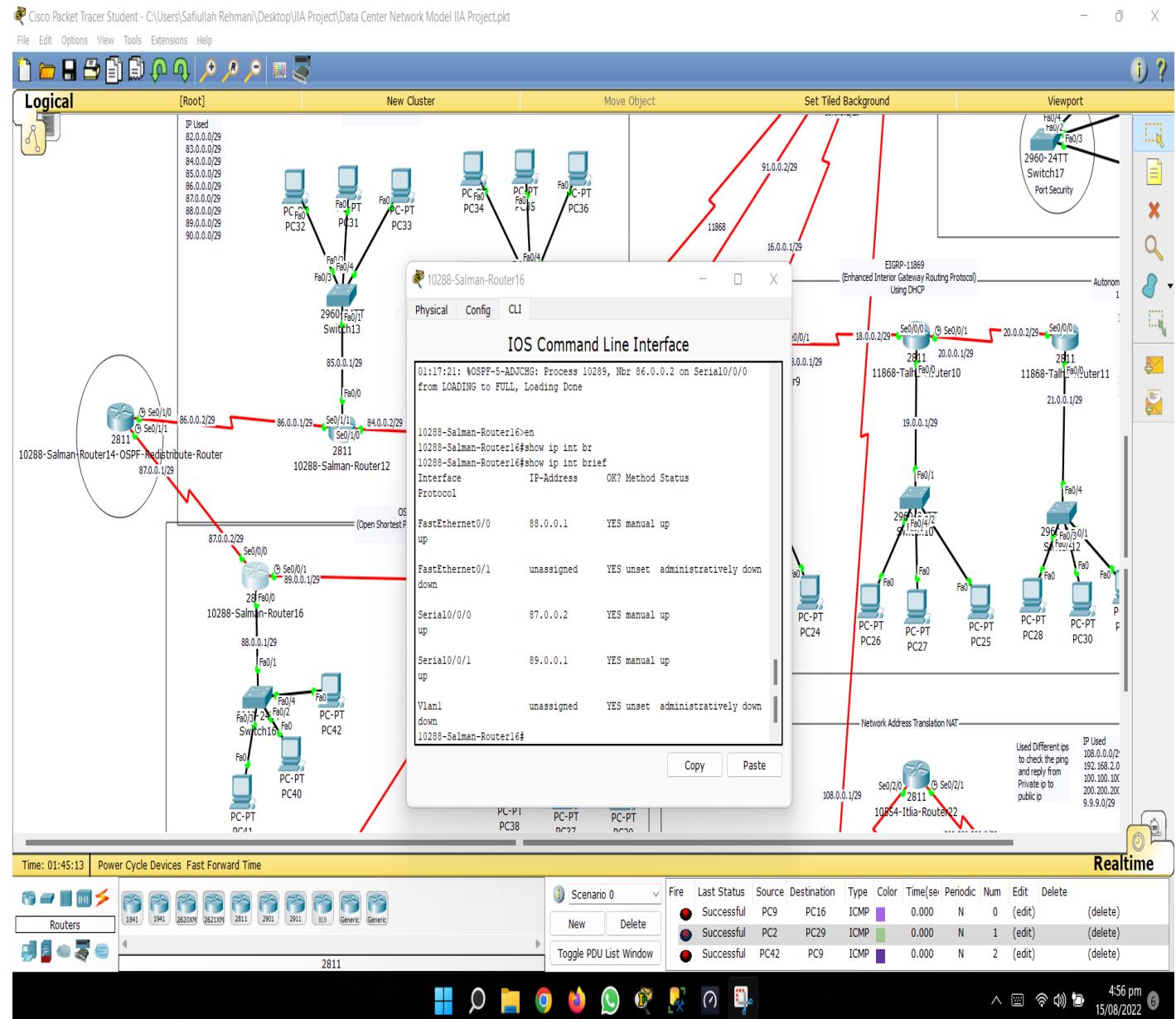
OSPF-10289 By DHCP Router 15:-

Show IP Interface Brief:-



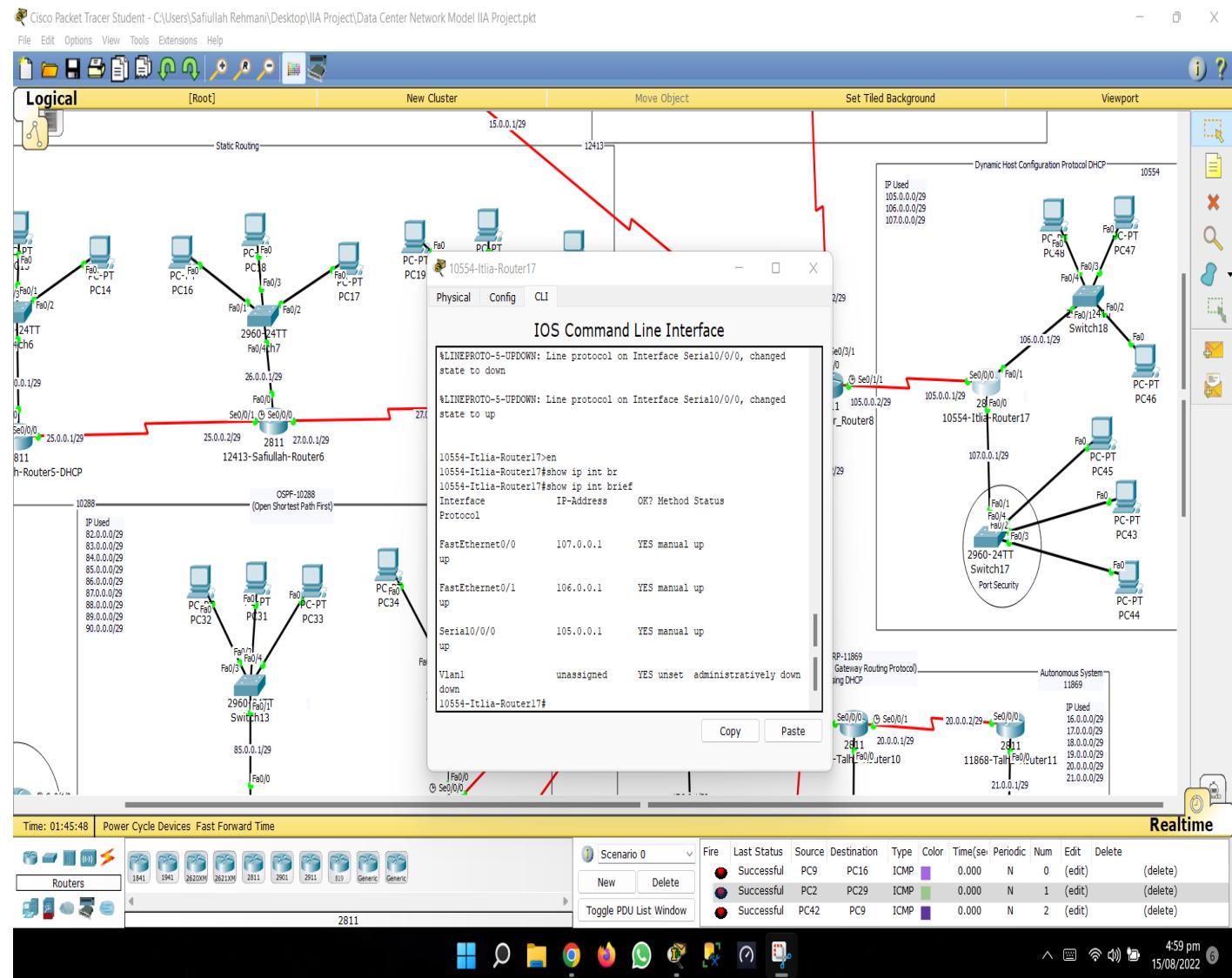
OSPF-10289 By DHCP Router 16:-

Show IP Interface Brief:-



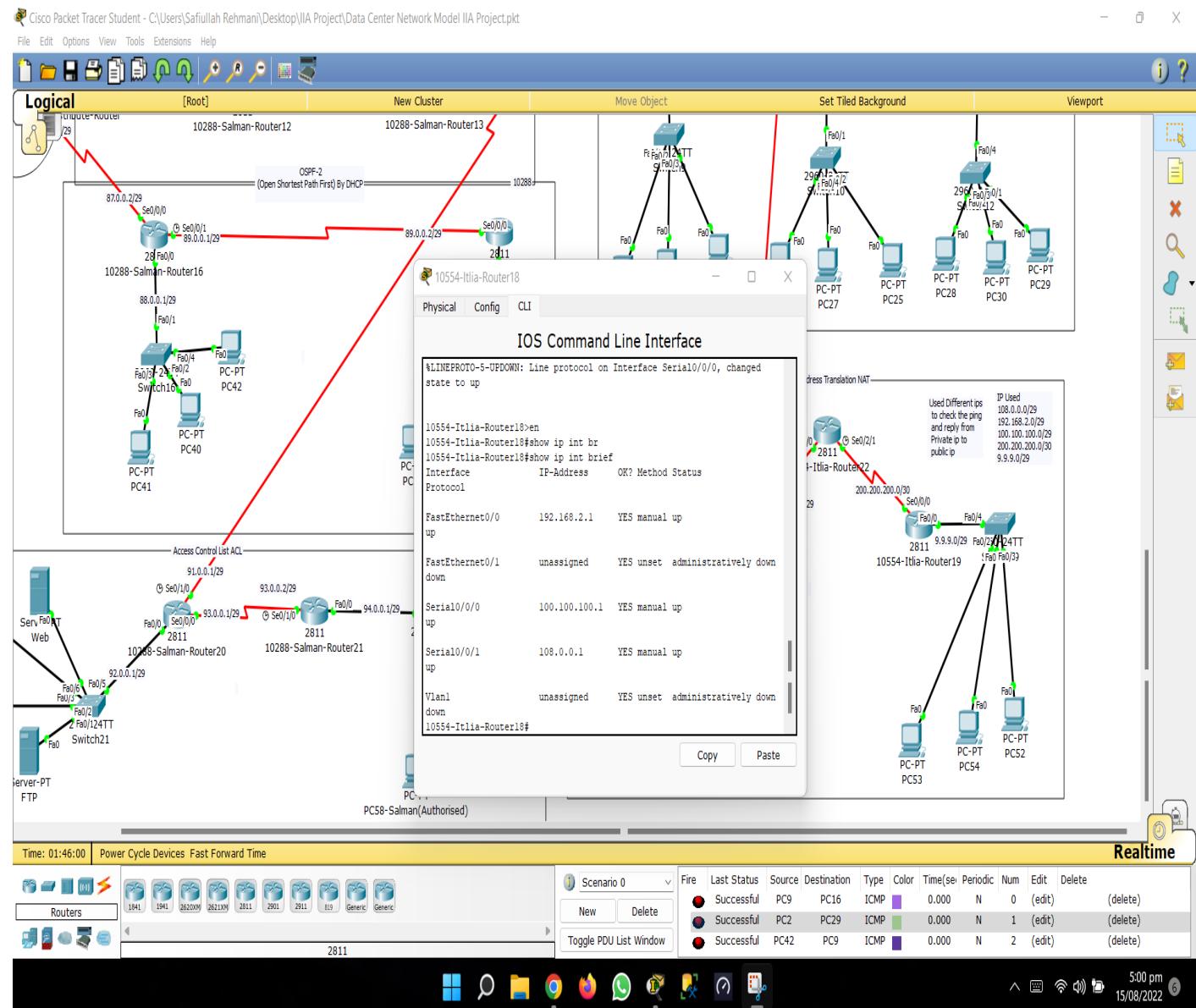
DHCP Router 17:-

Show IP Interface Brief:-



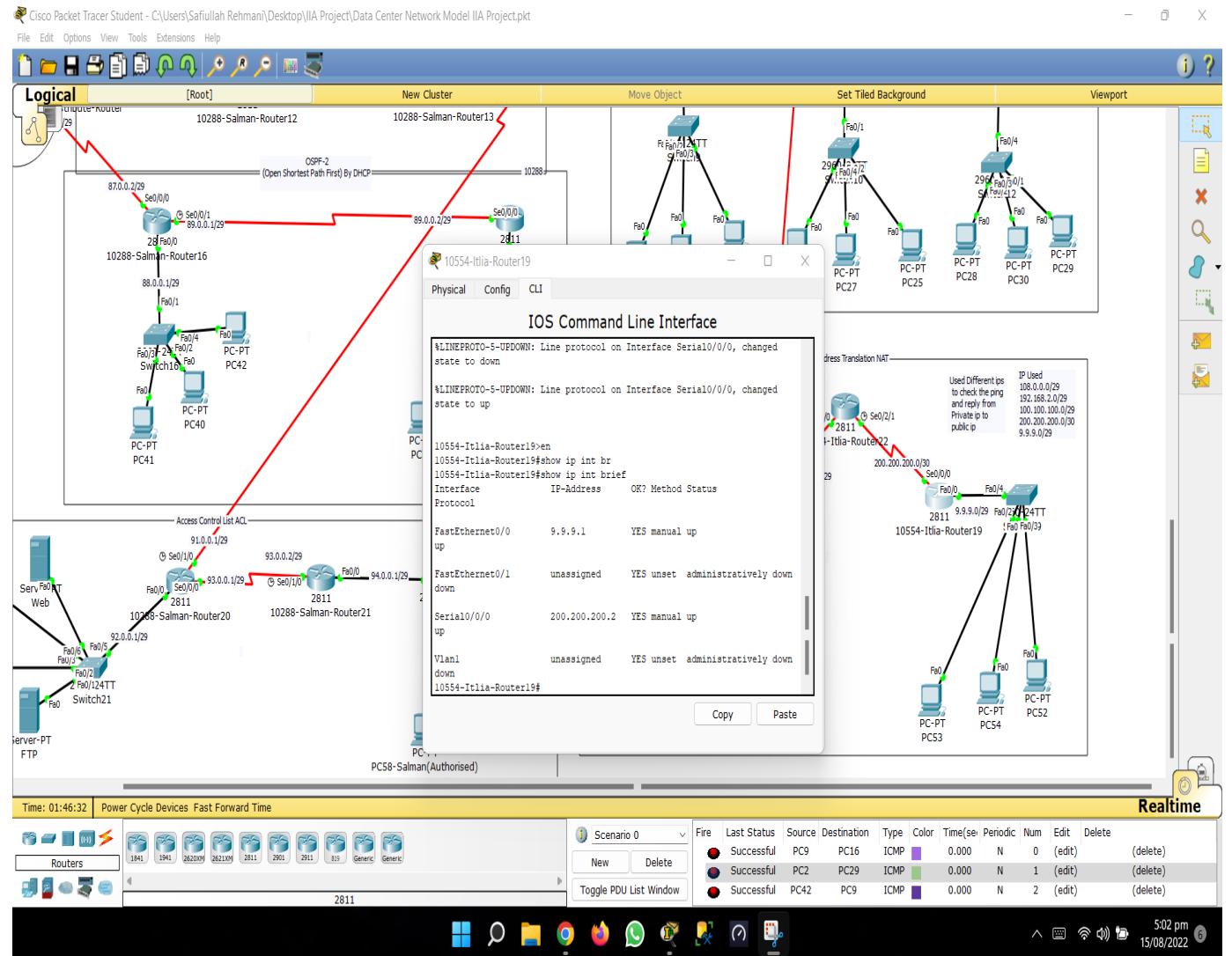
NAT Router 18:-

Show IP Interface Brief:-



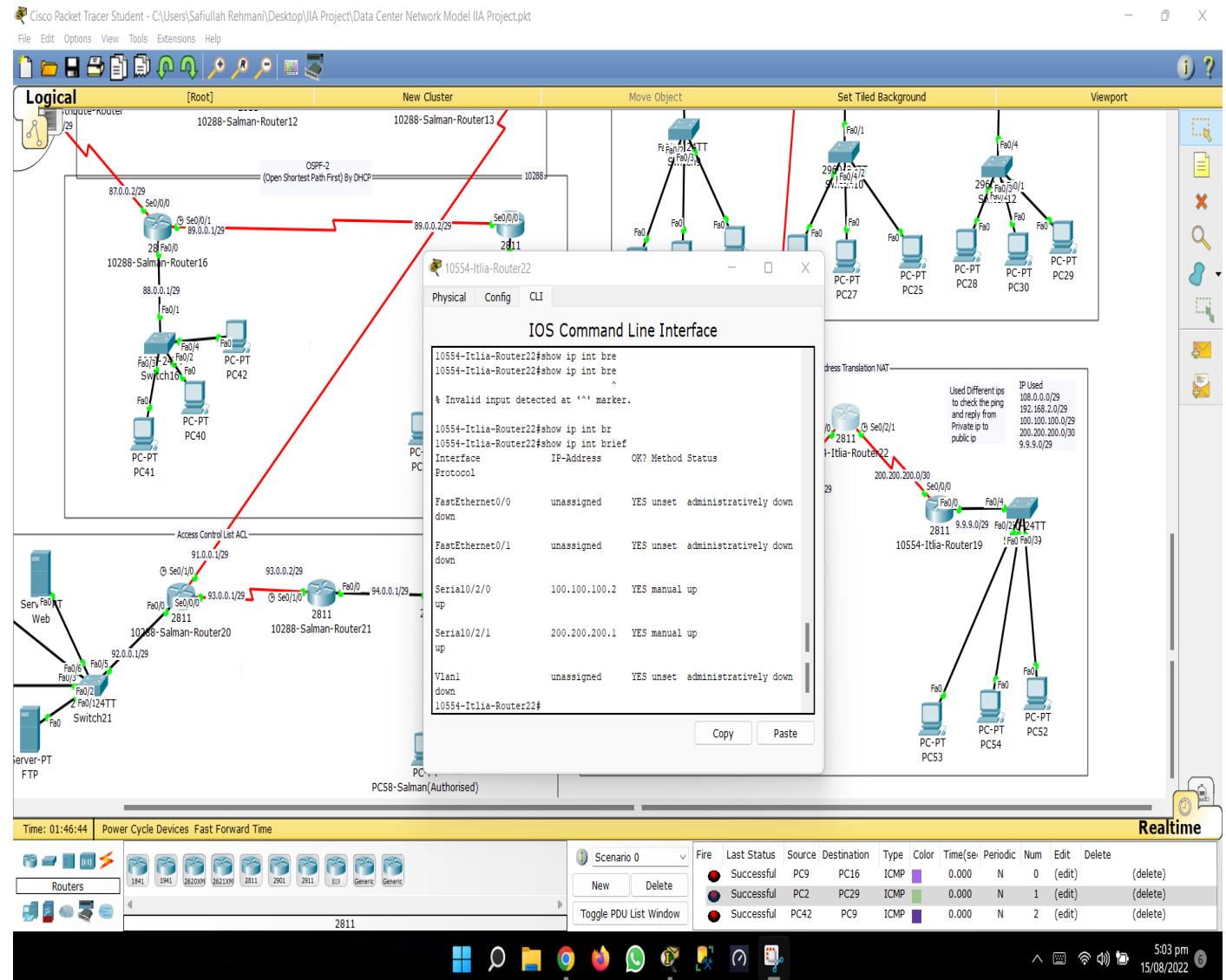
NAT Router 19:-

Show IP Interface Brief:-



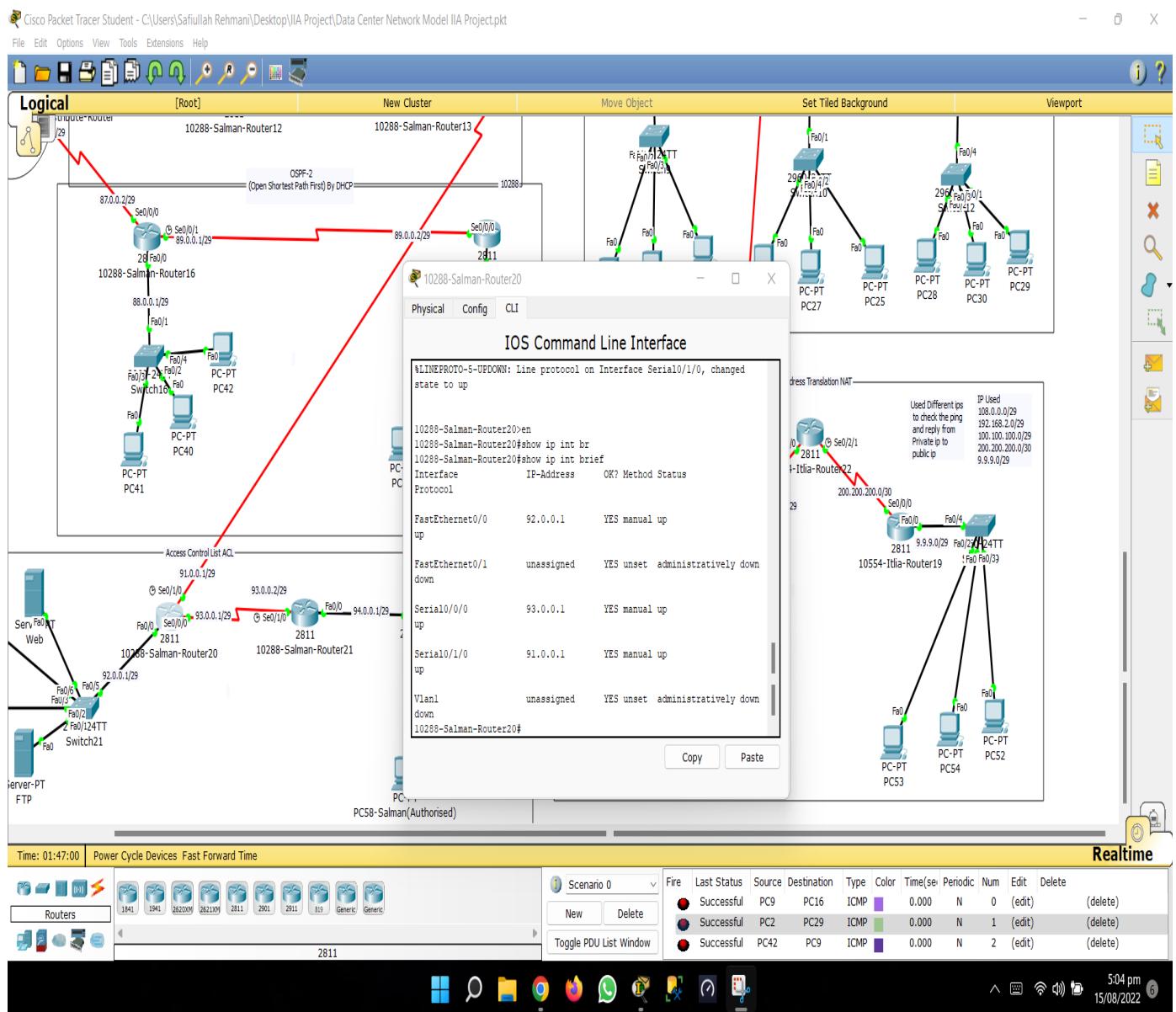
NAT Router 22:-

Show IP Interface Brief:-



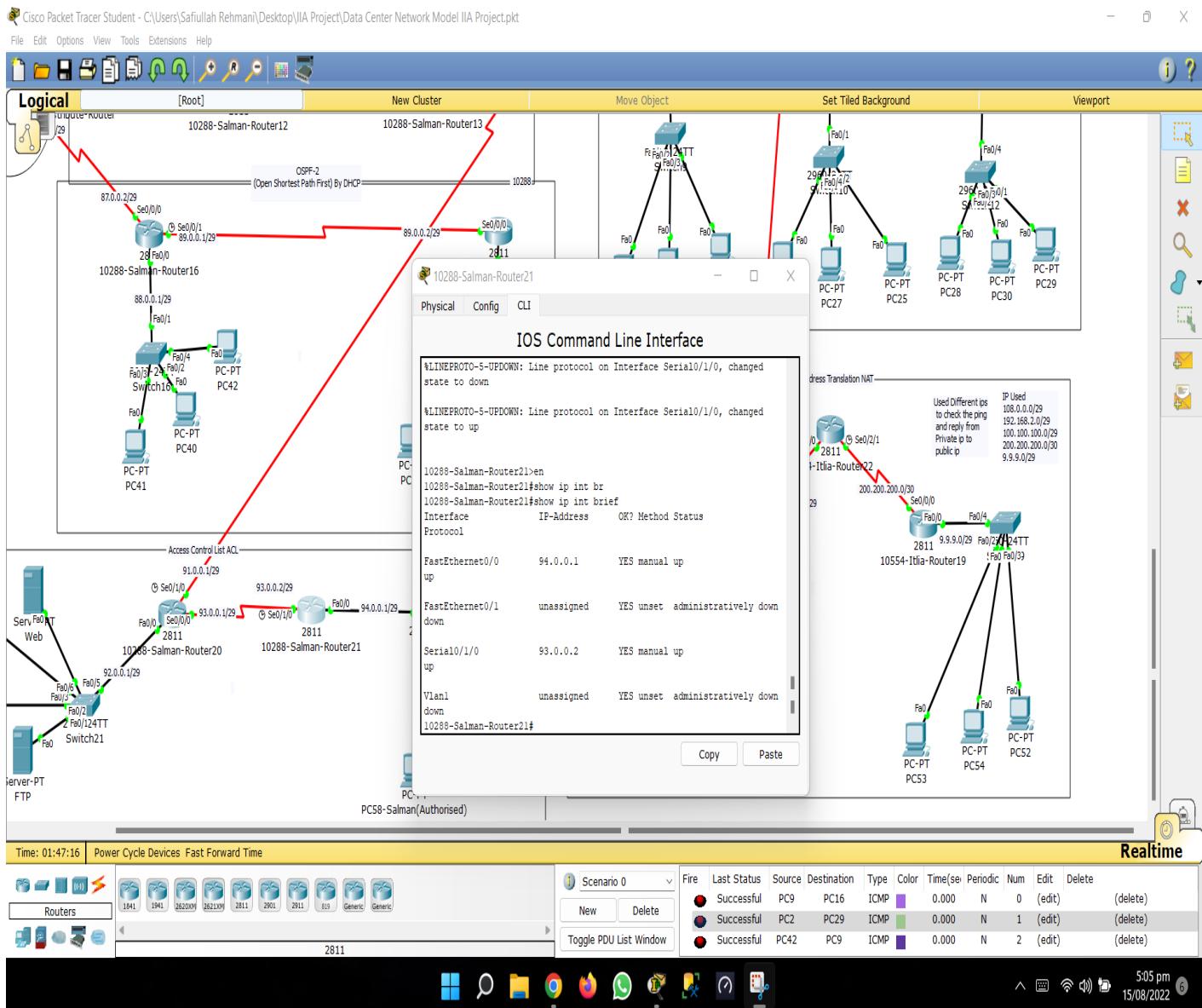
ACL Router 20:-

Show IP Interface Brief:-



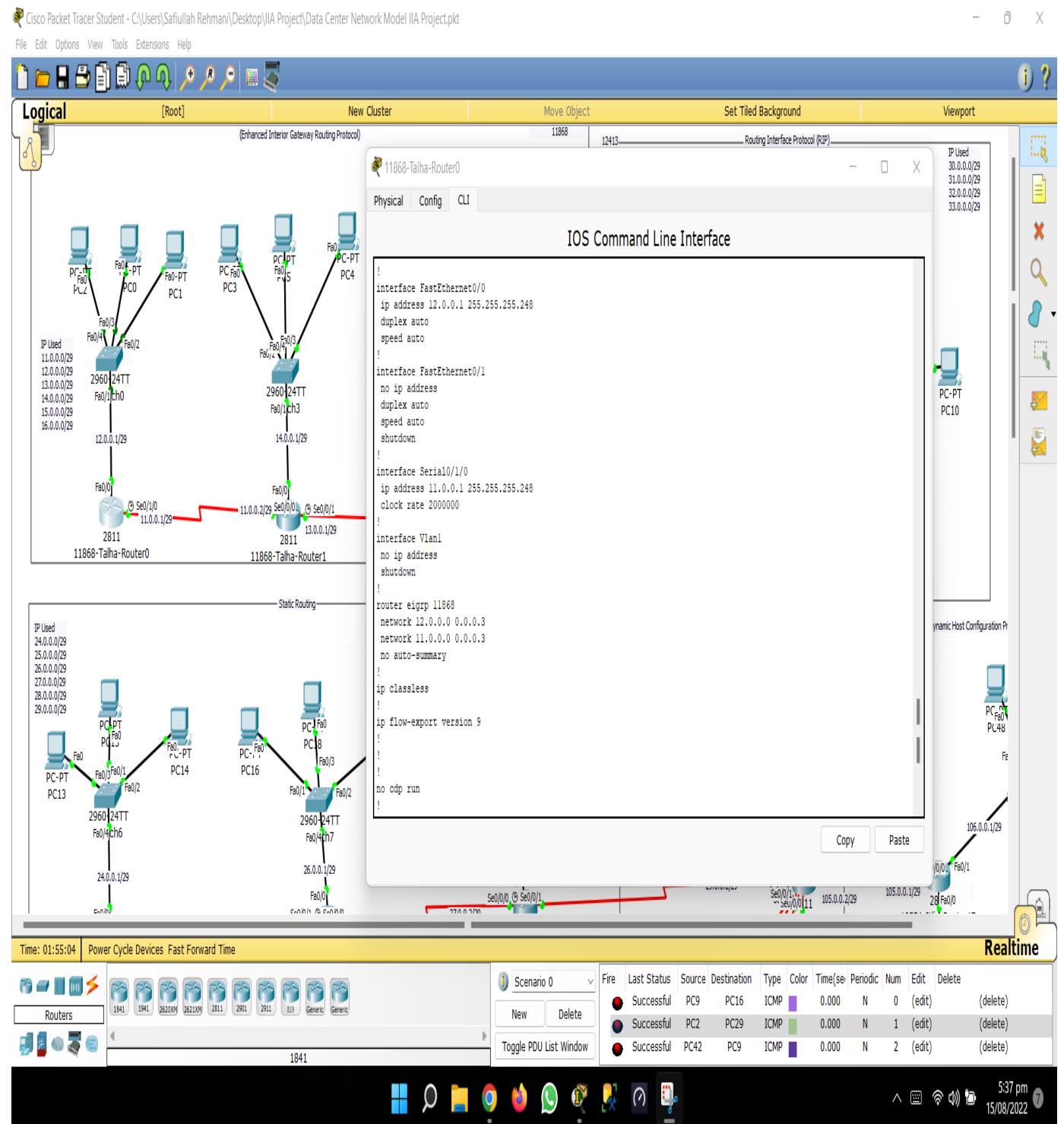
ACL Router 21:-

Show IP Interface Brief:-



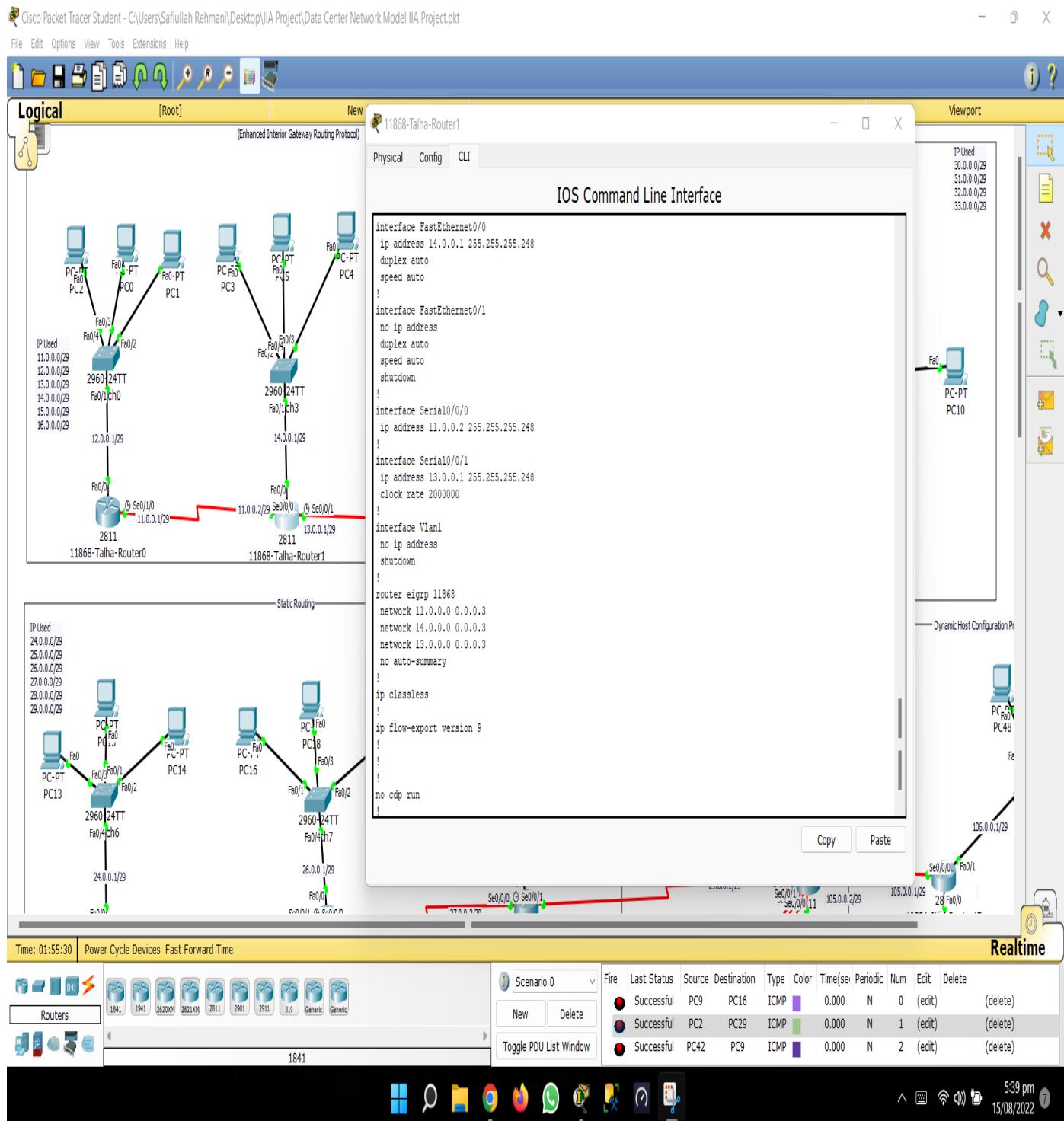
EIGRP-11868 Router 0:-

Show Running Config:-



EIGRP-11868 Router 1:-

Show Running Config:-



EIGRP-11868 Router 2:-

Show Running Config:-

Cisco Packet Tracer Student - C:\Users\Safiuullah Rehman\Desktop\IIA Project\Data Center Network Model IIA Project.pkt

File Edit Options View Tools Extensions Help

Logical [Root] New (Enhanced Interior Gateway Routing Protocol)

Physical **Config** CLI

IOS Command Line Interface

```
!
! interface FastEthernet0/0
ip address 16.0.0.1 255.255.255.248
duplex auto
speed auto
!
interface FastEthernet0/1
no ip address
duplex auto
speed auto
shutdown
!
interface Serial0/0/0
ip address 13.0.0.2 255.255.255.248
!
interface Serial0/0/1
ip address 15.0.0.1 255.255.255.248
clock rate 2000000
!
interface Vlan1
no ip address
shutdown
!
router eigrp 11868
network 13.0.0.0 0.0.0.7
network 16.0.0.0 0.0.0.7
network 15.0.0.0 0.0.0.7
no auto-summary
!
ip classless
!
ip flow-export version 9
!
--More--

```

Static Routing

Time: 01:55:40 Power Cycle Devices Fast Forward Time

Routers

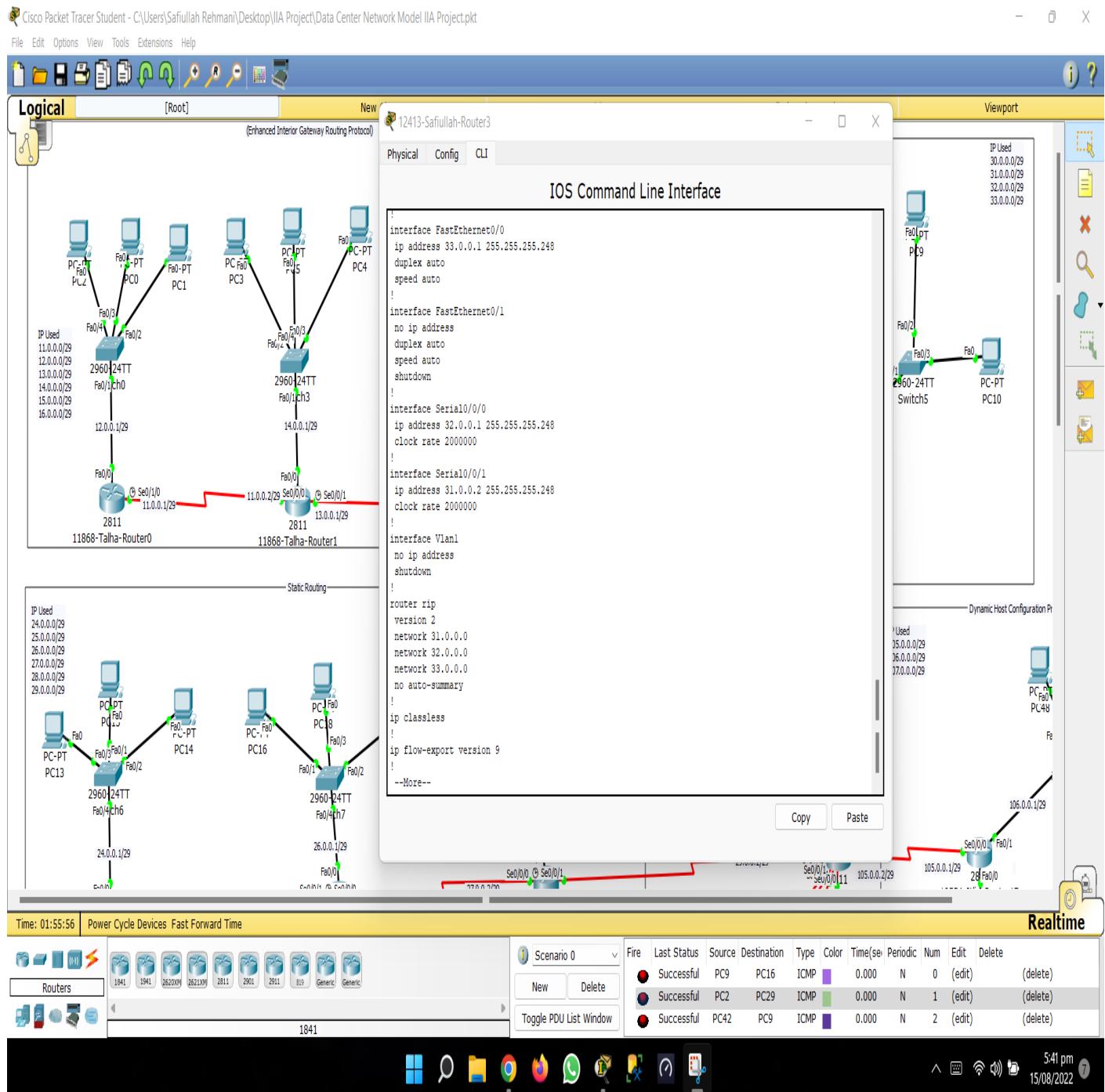
Scenario 0

Fire	Last Status	Source	Destination	Type	Color	Time(s)	Periodic	Num	Edit	Delete
Successful		PC9	PC16	ICMP	purple	0.000	N	0	(edit)	(delete)
Successful		PC2	PC29	ICMP	green	0.000	N	1	(edit)	(delete)
Successful		PC42	PC9	ICMP	purple	0.000	N	2	(edit)	(delete)

1841 5:40 pm 15/08/2022

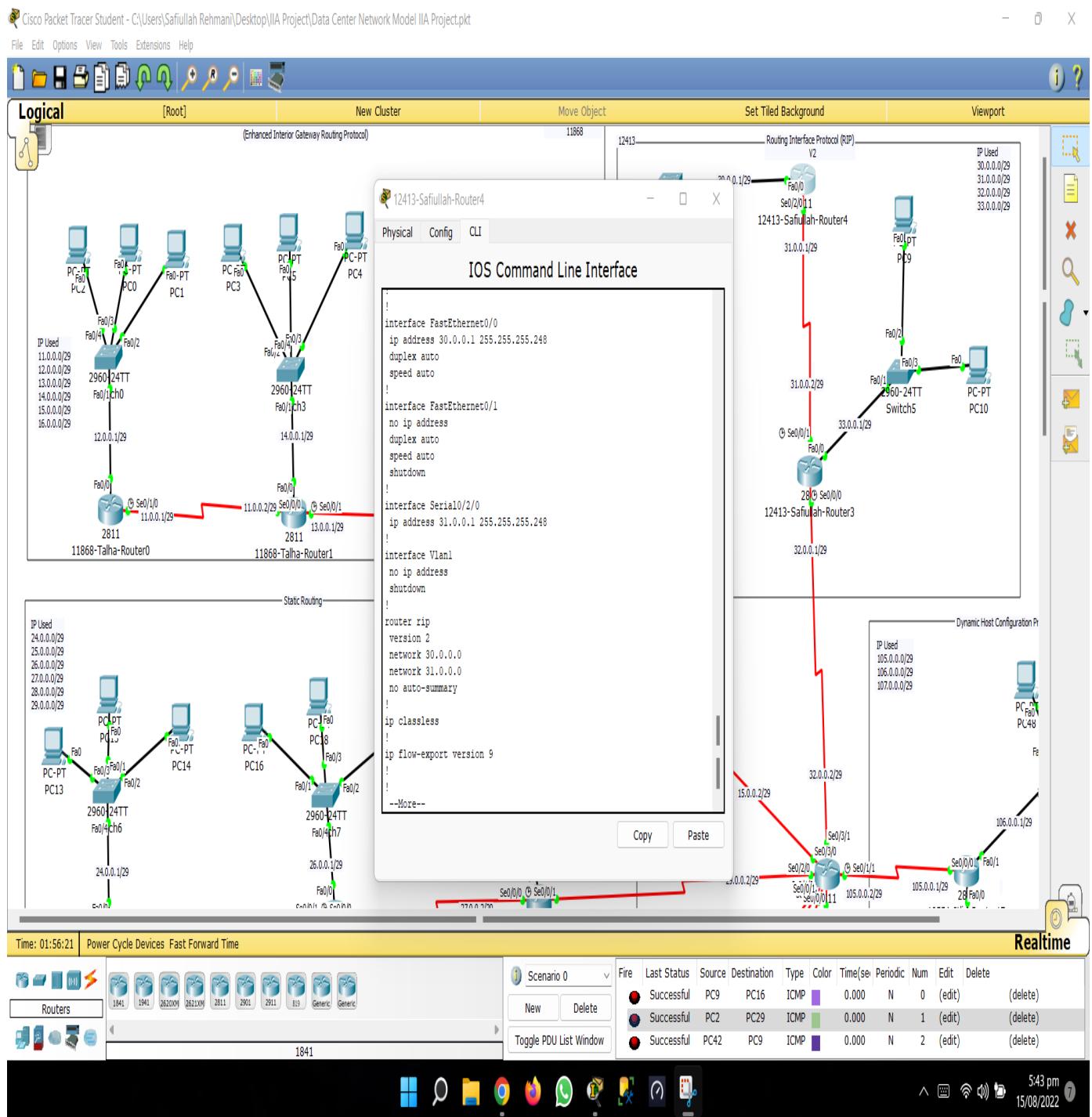
RIP-V2 Router 3:-

Show Running Config:-



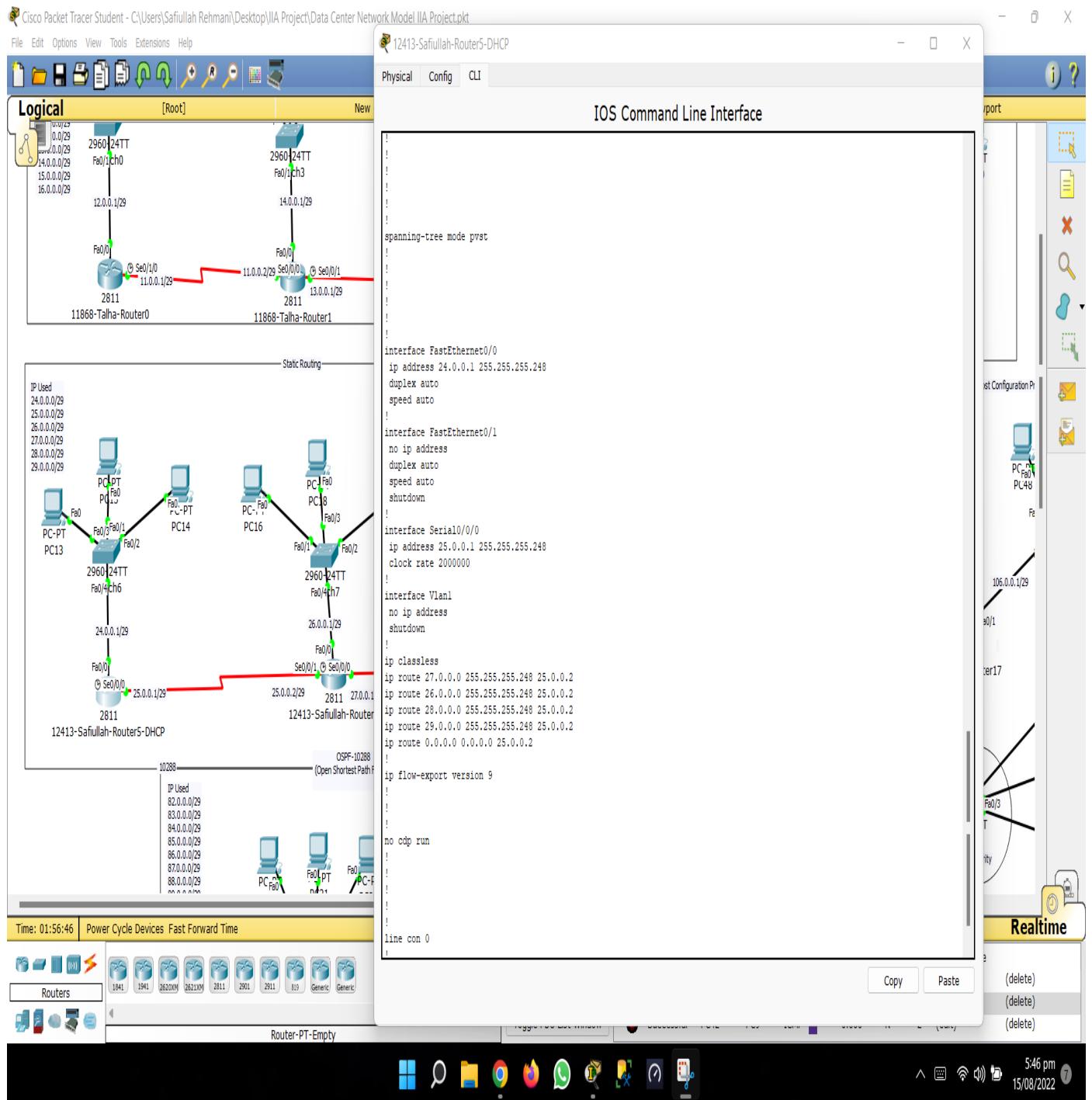
RIP-V2 Router 4:-

Show Running Config:-



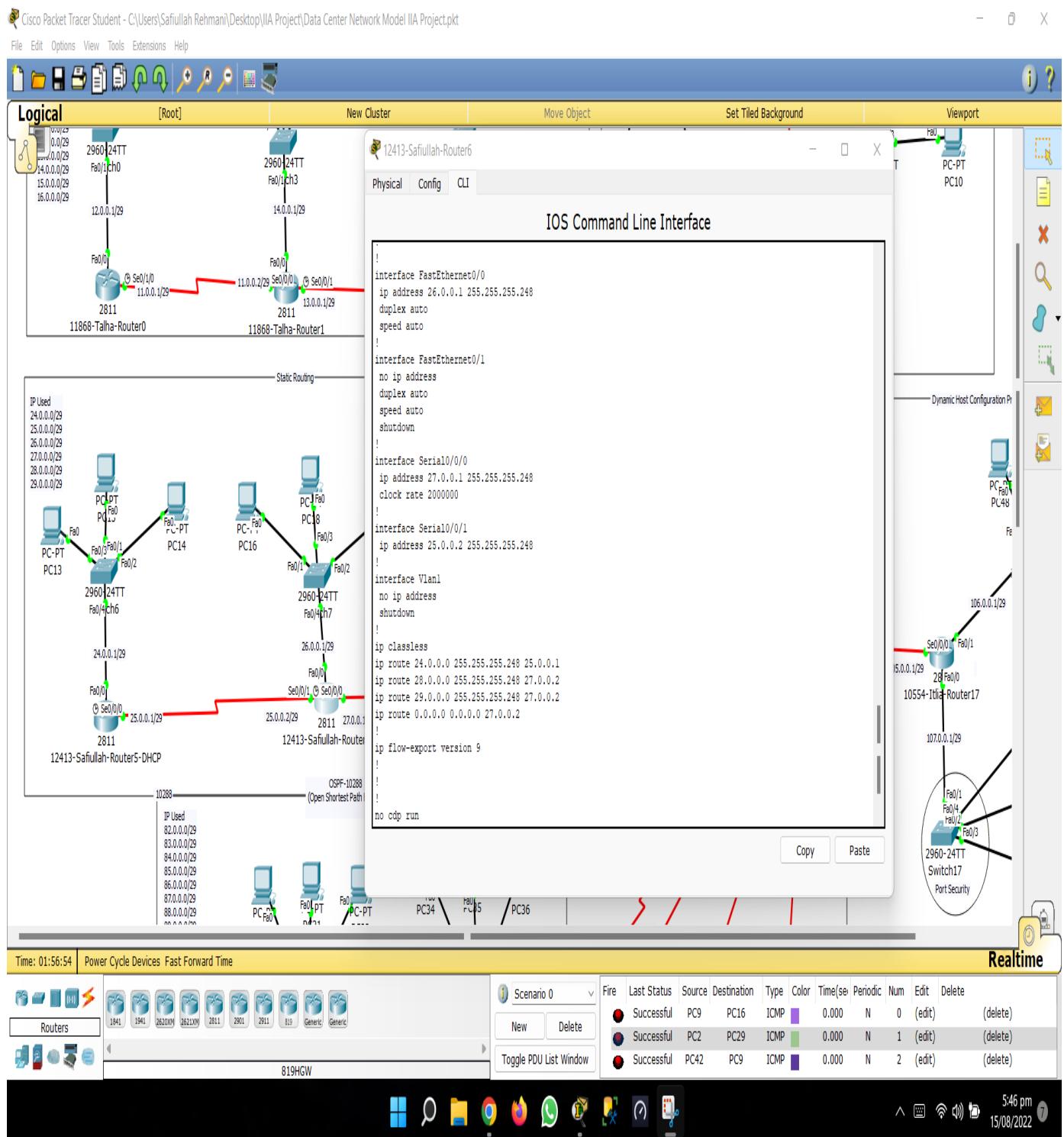
Static Router 5:-

Show Running Config:-



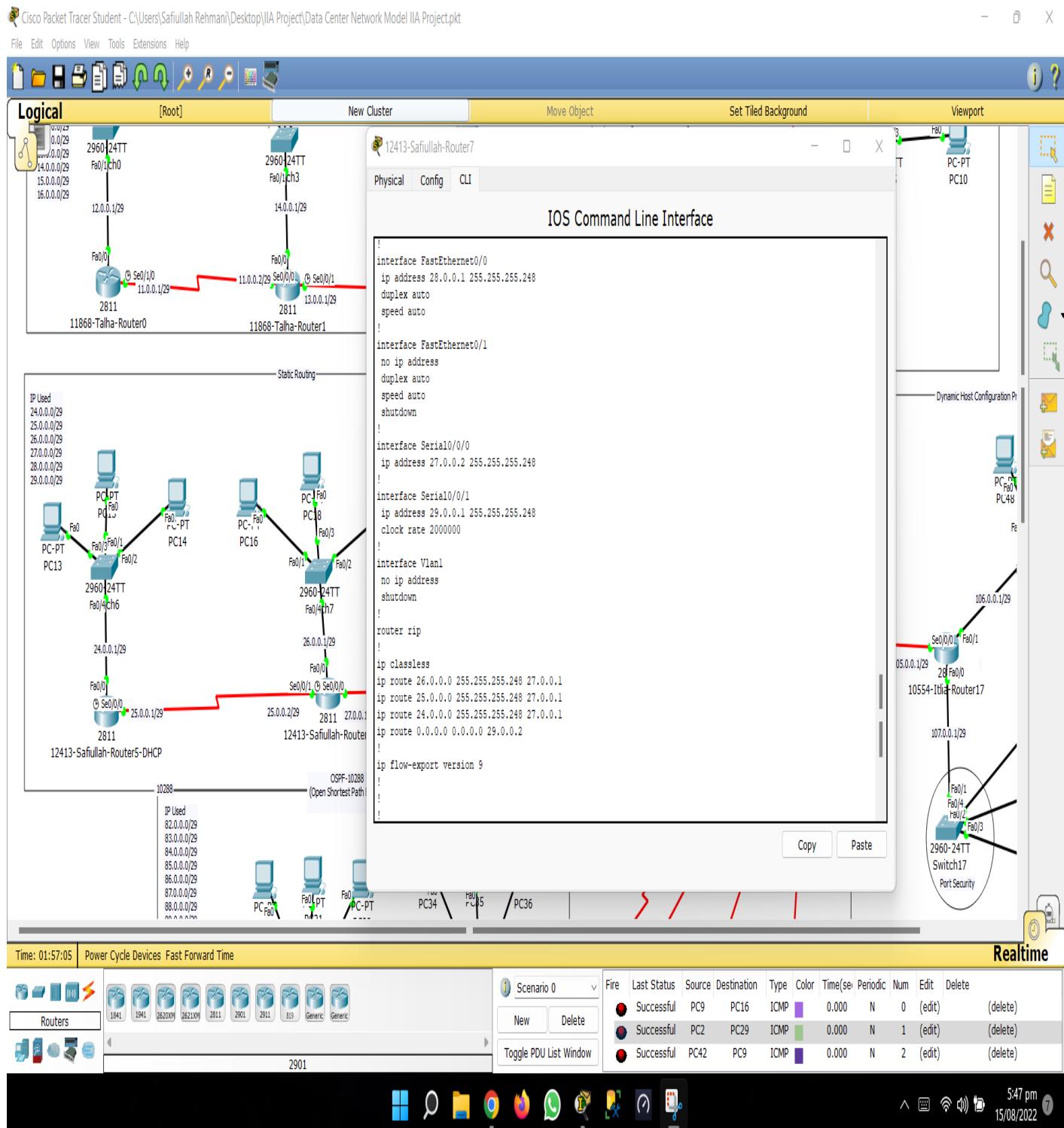
Static Router 6:-

Show Running Config:-



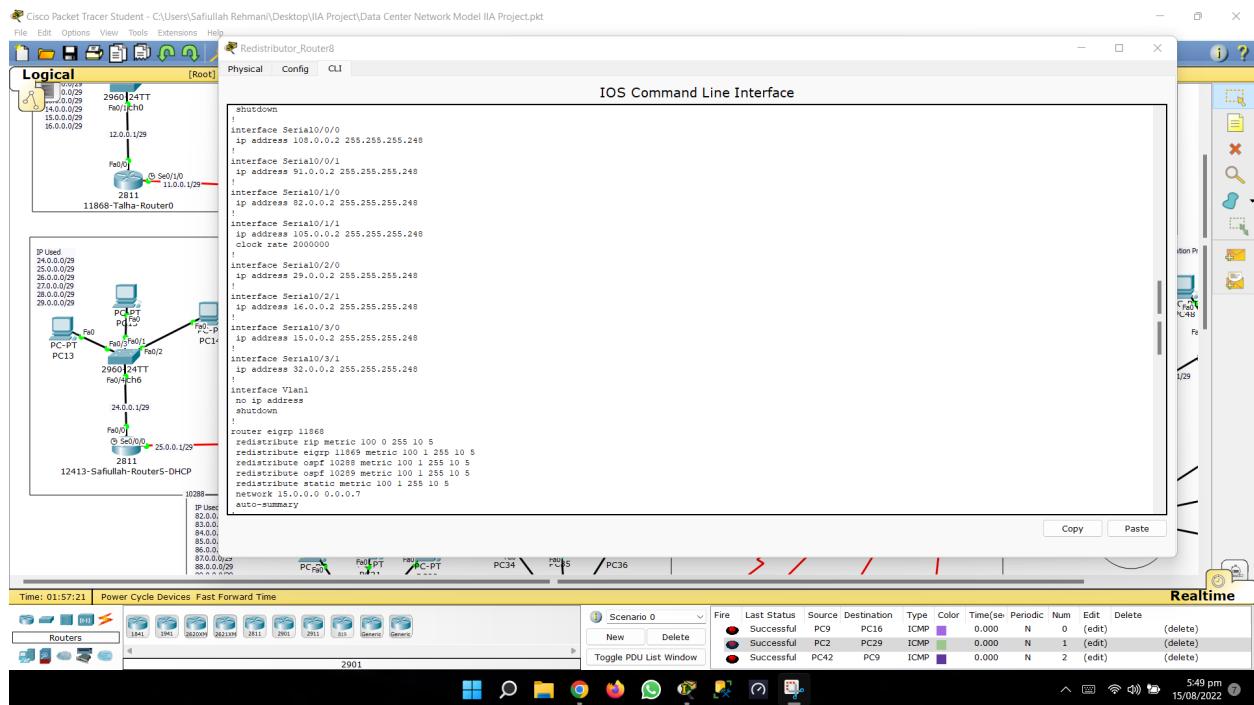
Static Router 7:-

Show Running Config:-

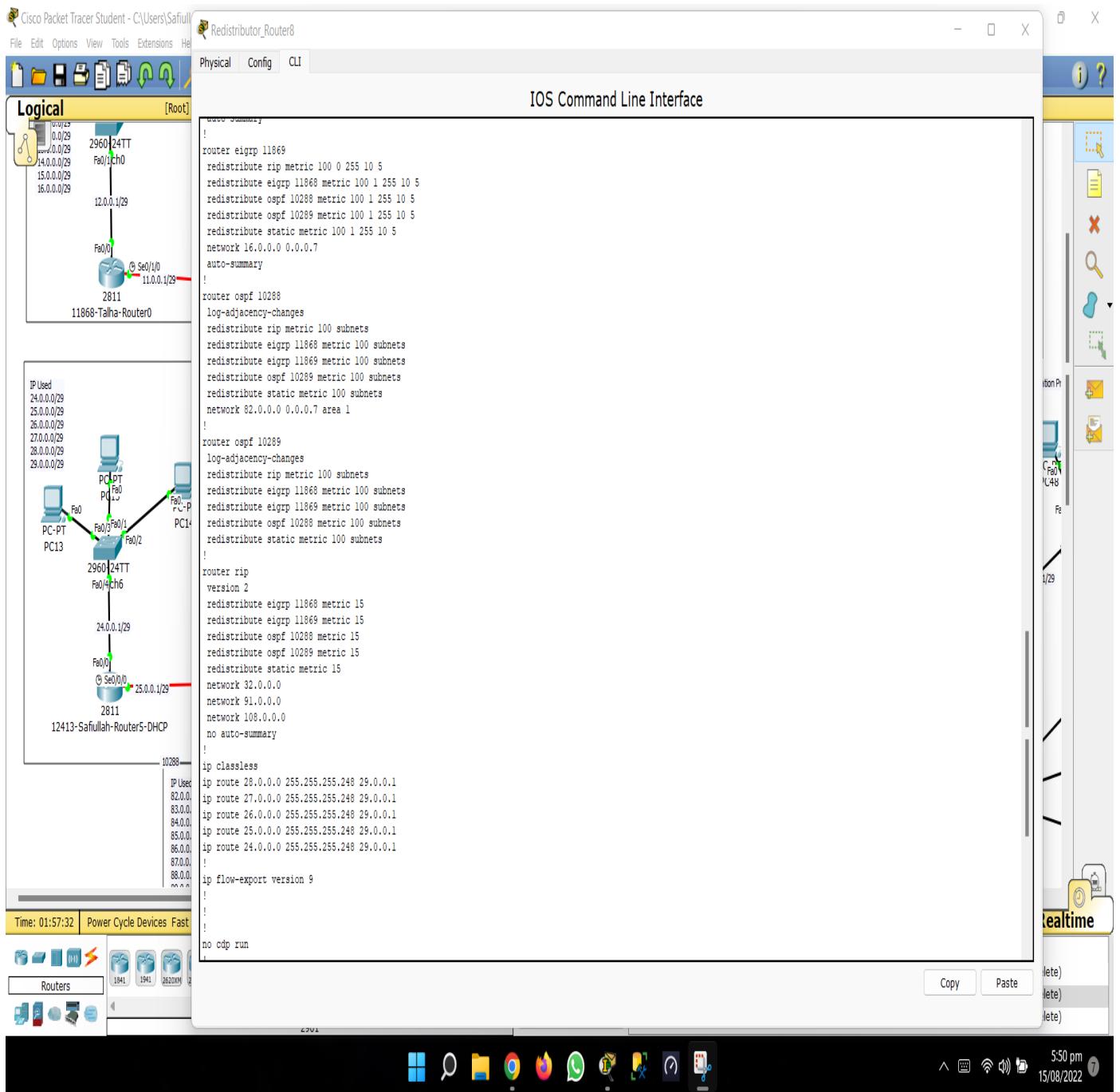


Main Redistributor Router 8:-

Show Running Config:-

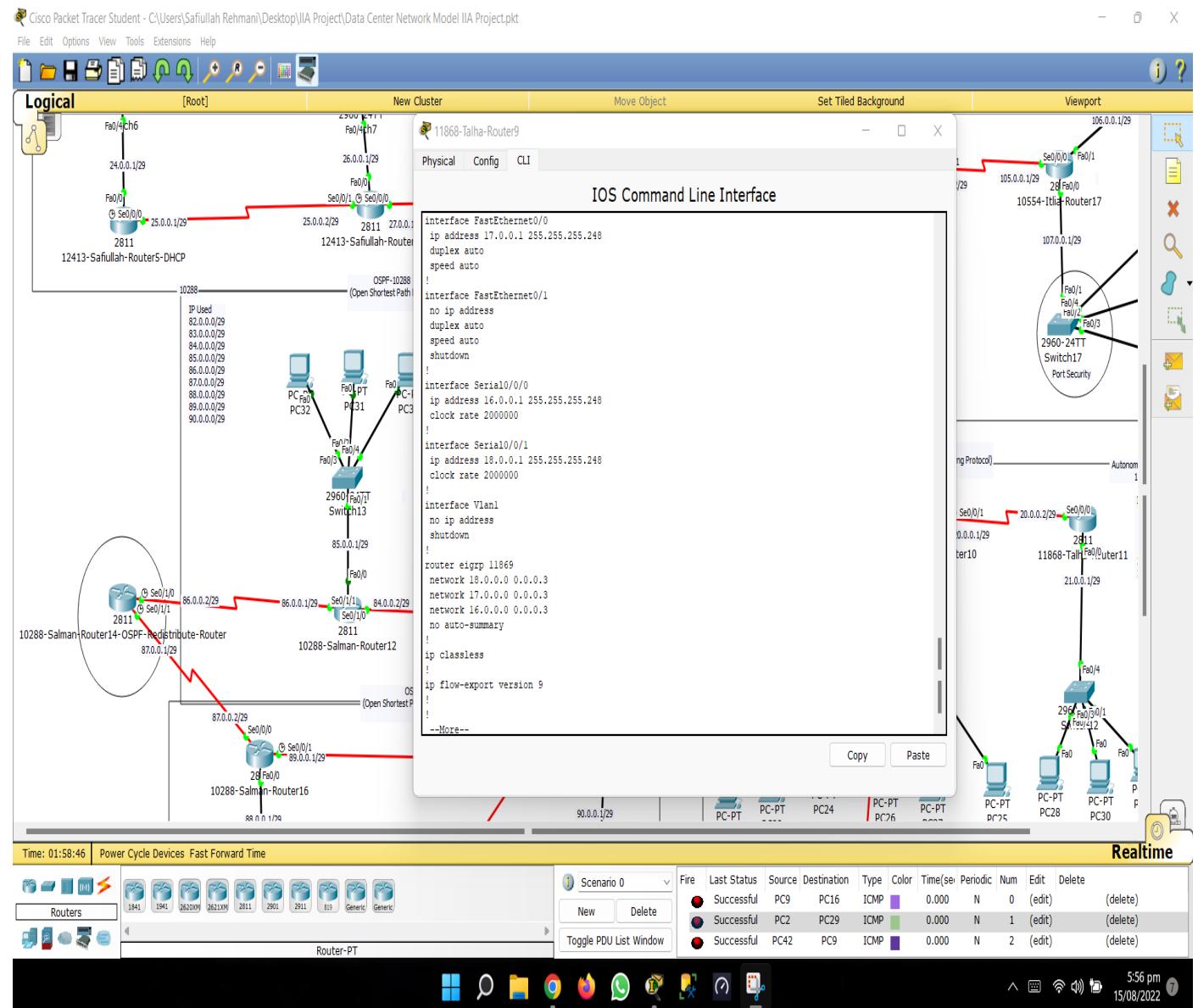


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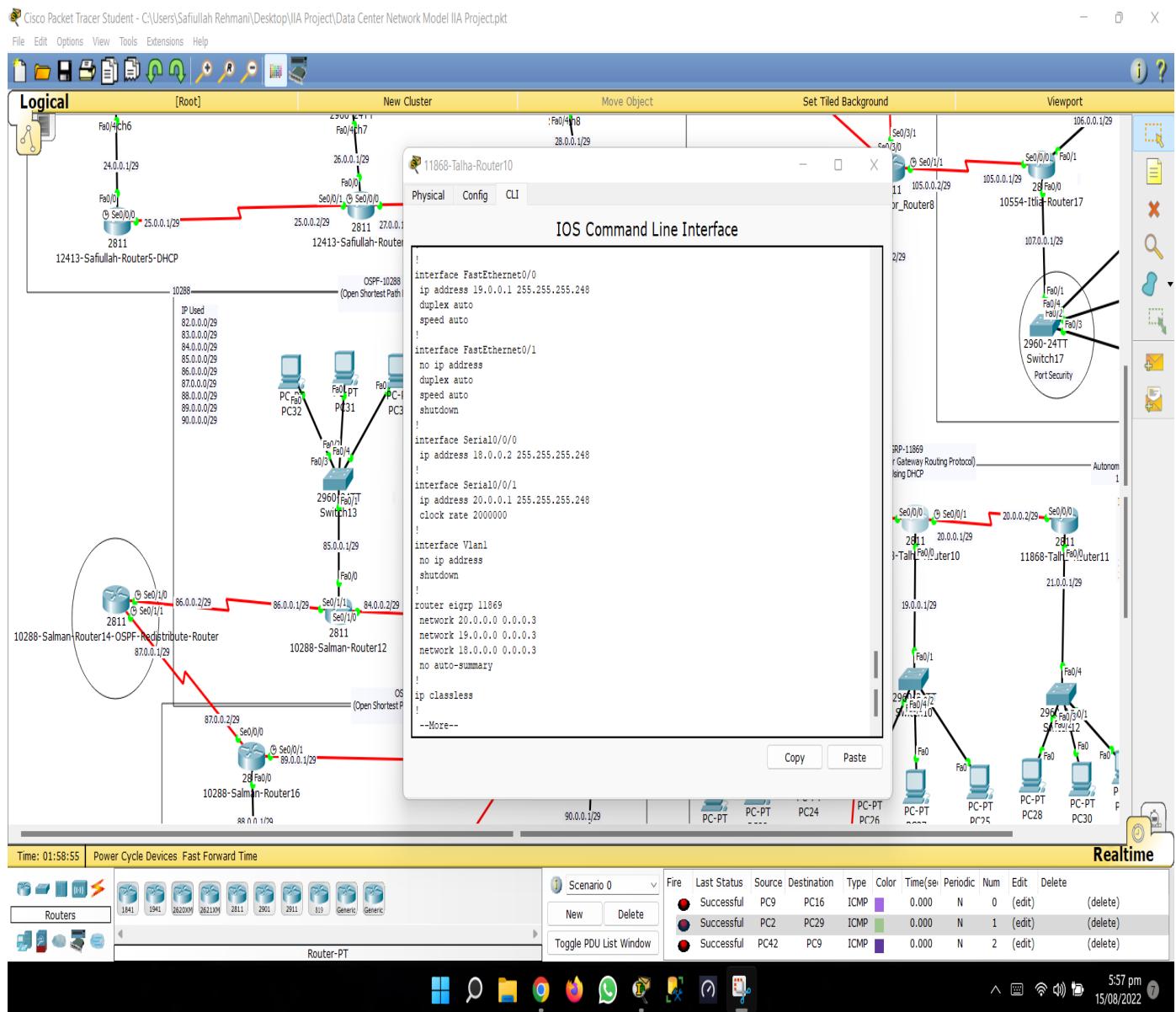
EIGRP-11869 By DHCP Router 9:-

Show Running Config:-



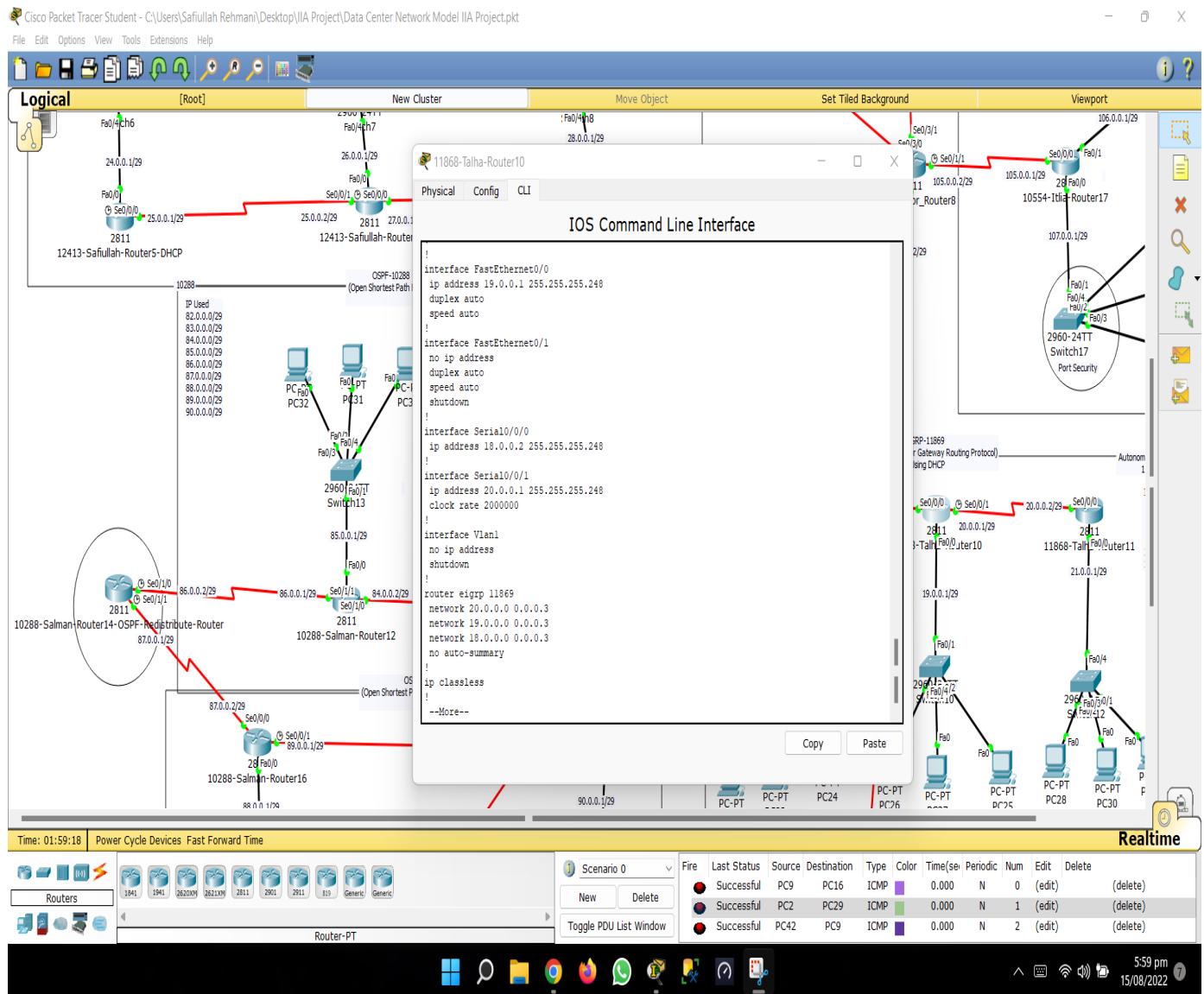
EIGRP-11869 By DHCP Router 10:-

Show Running Config:-



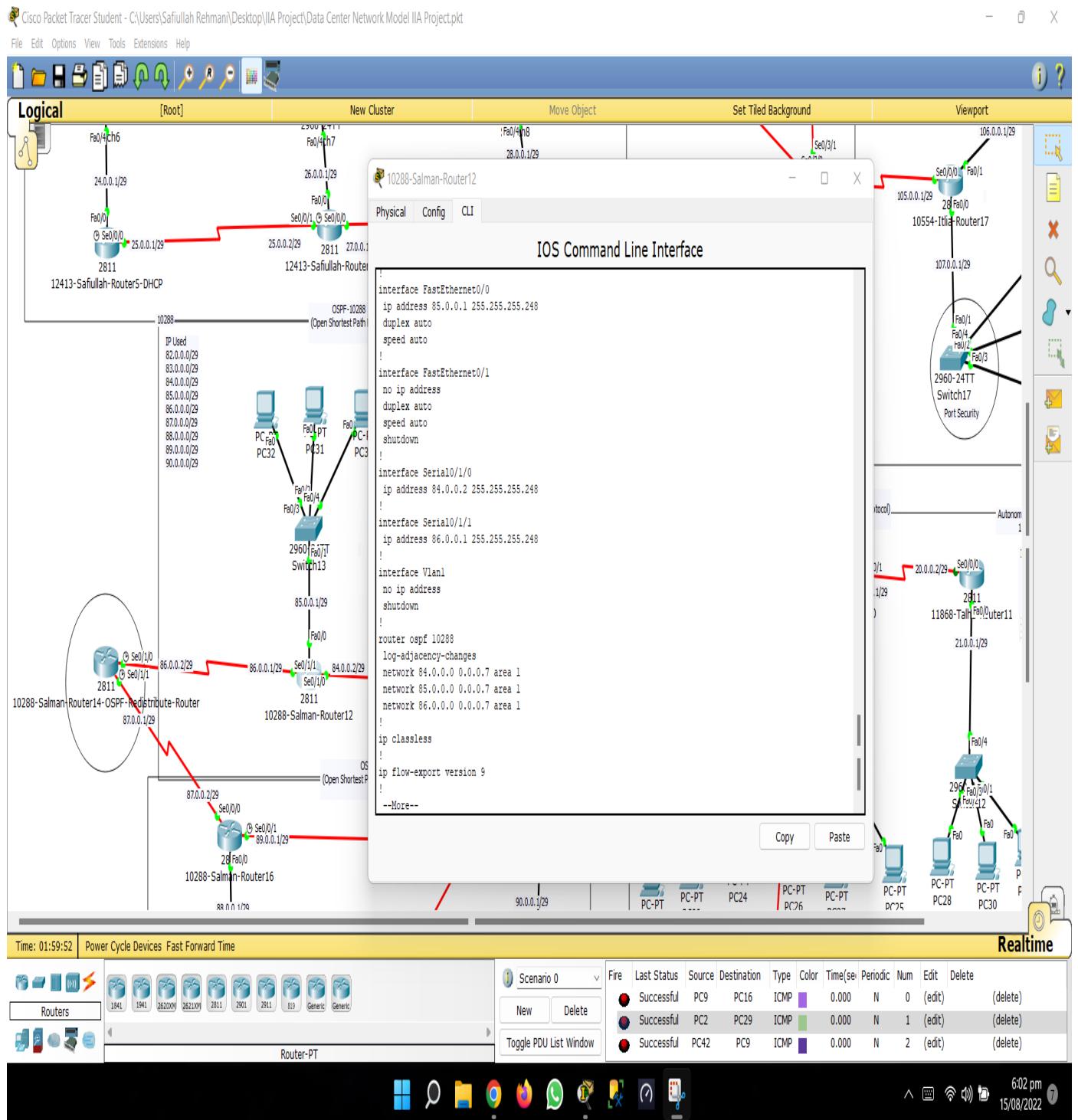
EIGRP-11869 By DHCP Router 11:-

Show Running Config:-



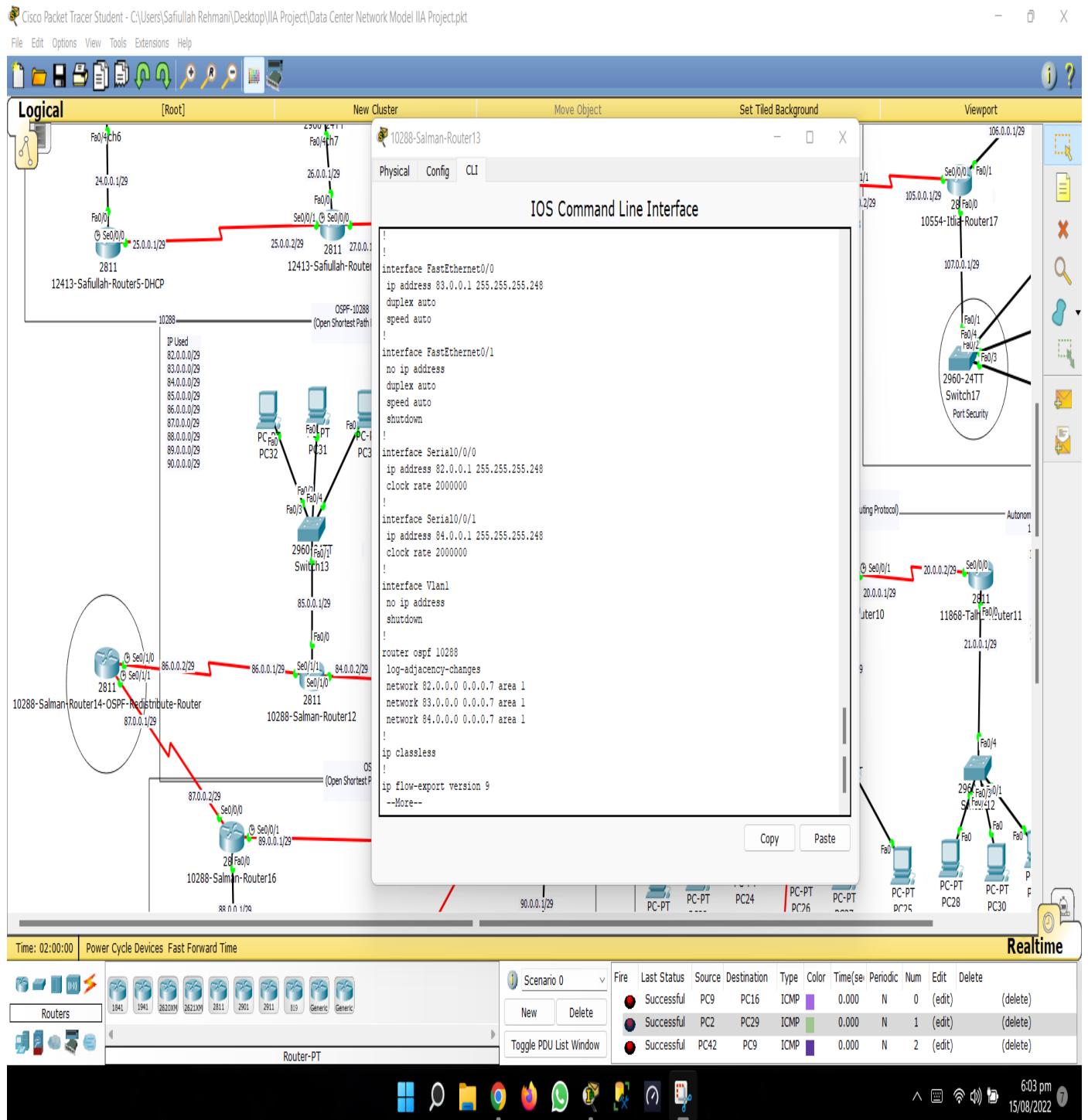
OSPF-10288 Router 12:-

Show Running Config:-



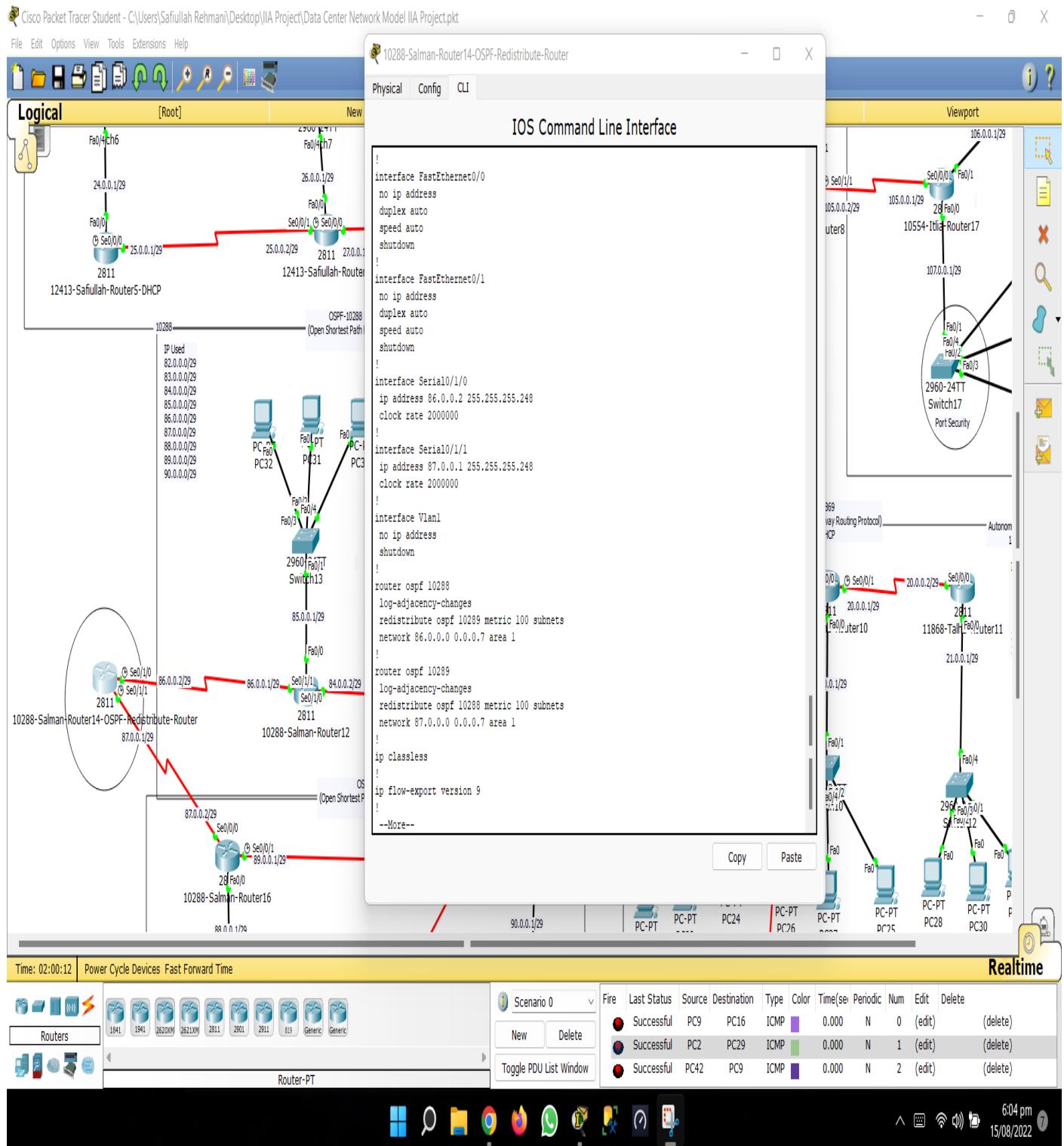
OSPF-10288 Router 13:-

Show Running Config:-



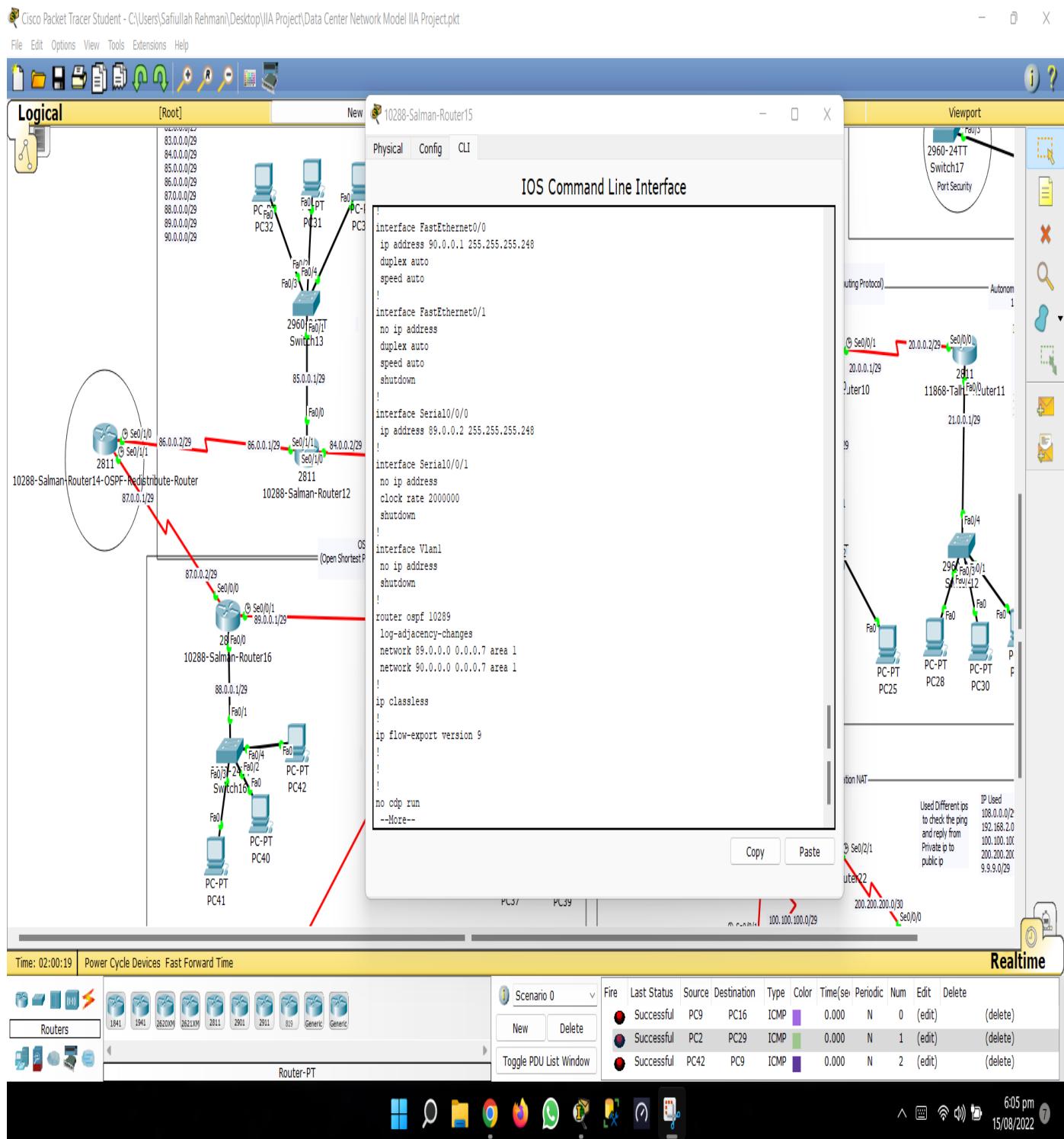
Redistributor Router for OSPF Router 14:-

Show Running Config:-



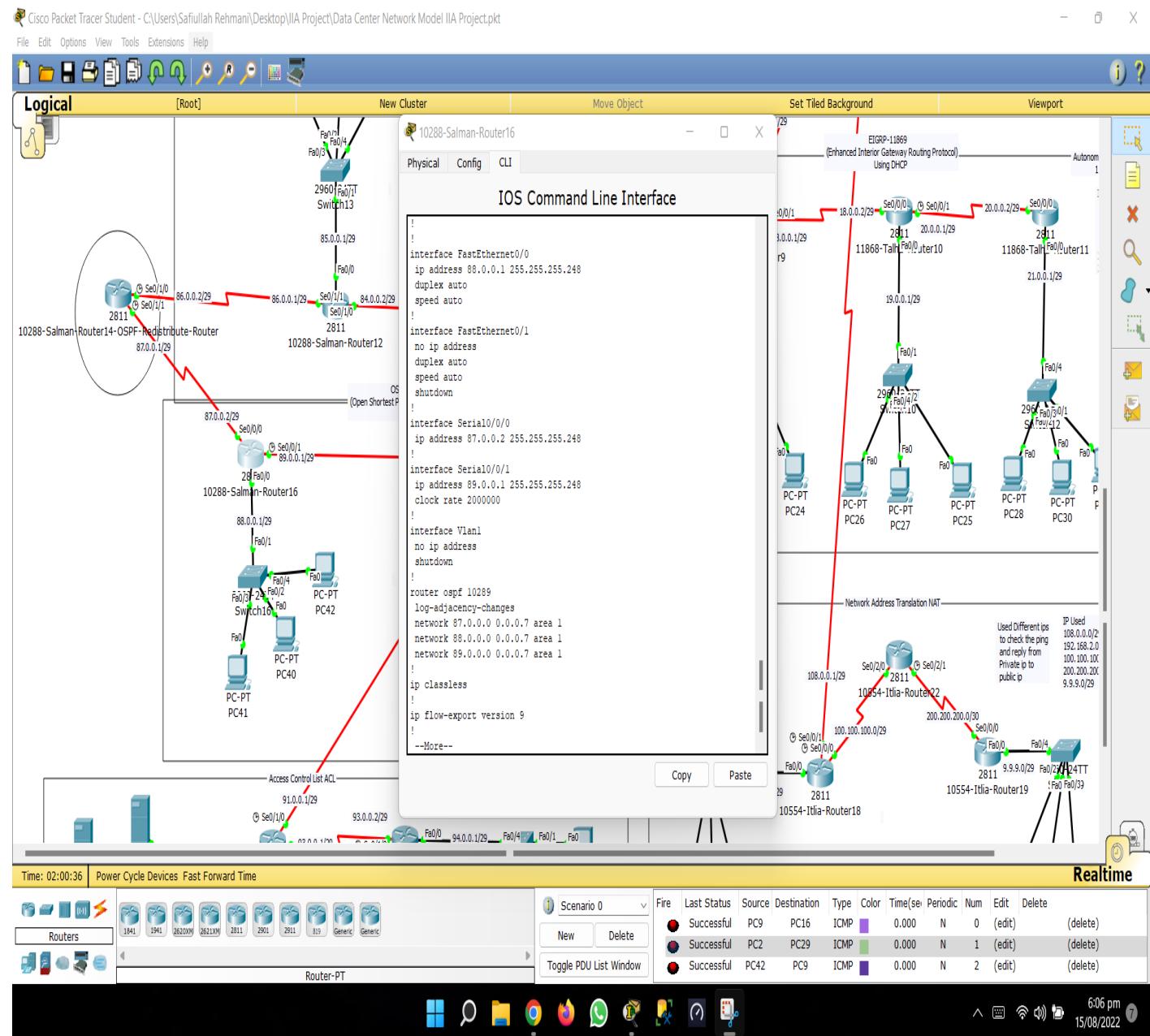
OSPF-10289 By DHCP Router 15:-

Show Running Config:-



OSPF-10289 By DHCP Router 16:-

Show Running Config:-



DHCP Router 17:-

Show Running Config:-

Cisco Packet Tracer Student - C:\Users\Saifullah Rehman\Desktop\IIA Project\Data Center Net

File Edit Options View Tools Extensions Help

Physical Config CLI

Logical [Root] New

```

! ip dhcp pool 10554ItliaDHCP1
network 106.0.0.0 255.255.255.248
default-router 106.0.0.1
ip dhcp pool 10554ItliaDHCP2
network 107.0.0.0 255.255.255.248
default-router 107.0.0.1
!
no ip cef
no ipv6 cef
!
spanning-tree mode pvst
!
interface FastEthernet0/0
ip address 107.0.0.1 255.255.255.248
duplex auto
speed auto
!
interface FastEthernet0/1
ip address 106.0.0.1 255.255.255.248
duplex auto
speed auto
!
interface Serial0/0/0
ip address 105.0.0.1 255.255.255.248
!
interface Vlan1
no ip address
shutdown
!
ip classless

```

IOS Command Line Interface

Viewport

Time(se)	Periodic	Num	Edit	Delete
0.000	N	0	(edit)	(delete)
0.000	N	1	(edit)	(delete)
0.000	N	2	(edit)	(delete)

Time: 02:01:01 Power Cycle Devices Fast Forward Time

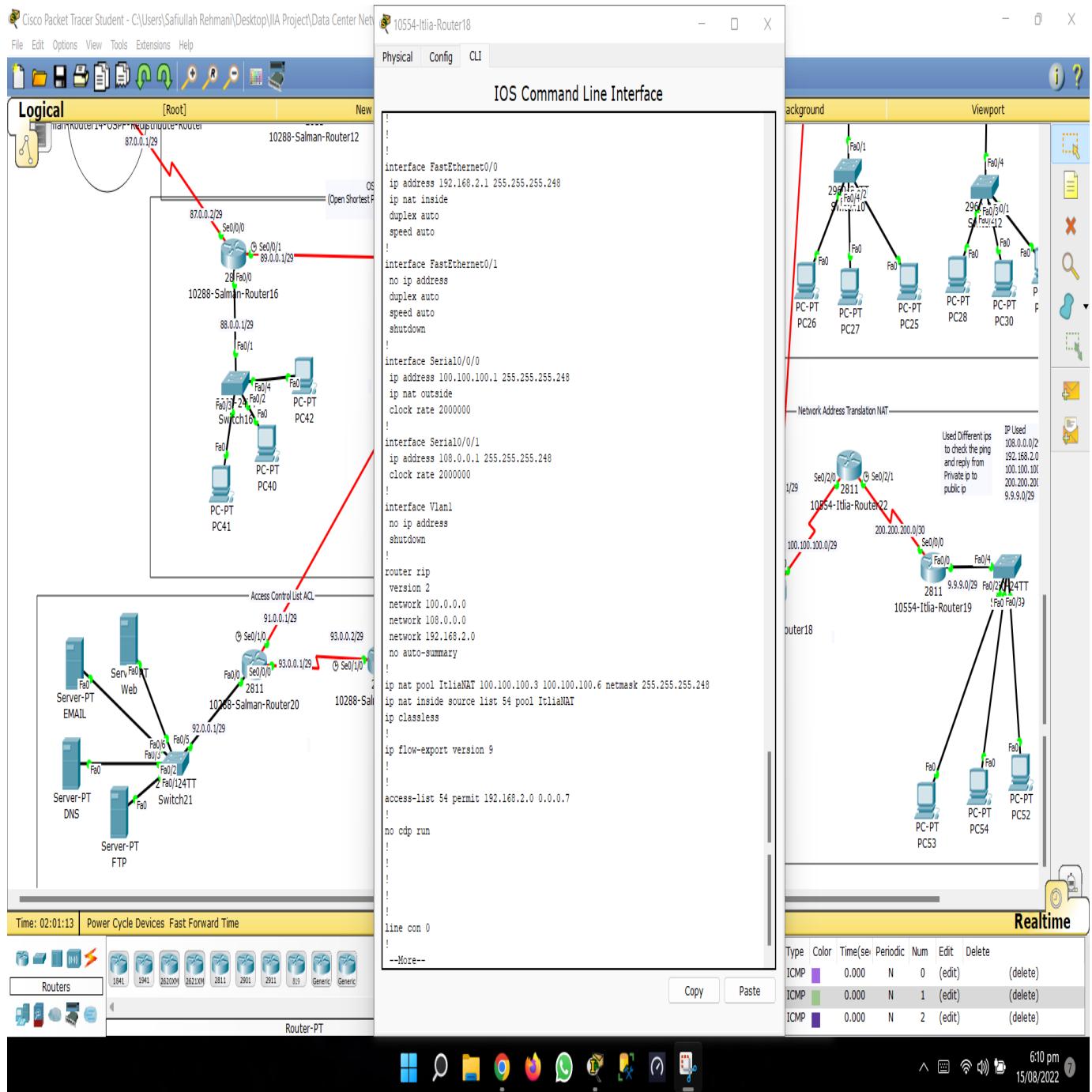
Routers Router-PT

Copy Paste

6:09 pm 15/08/2022

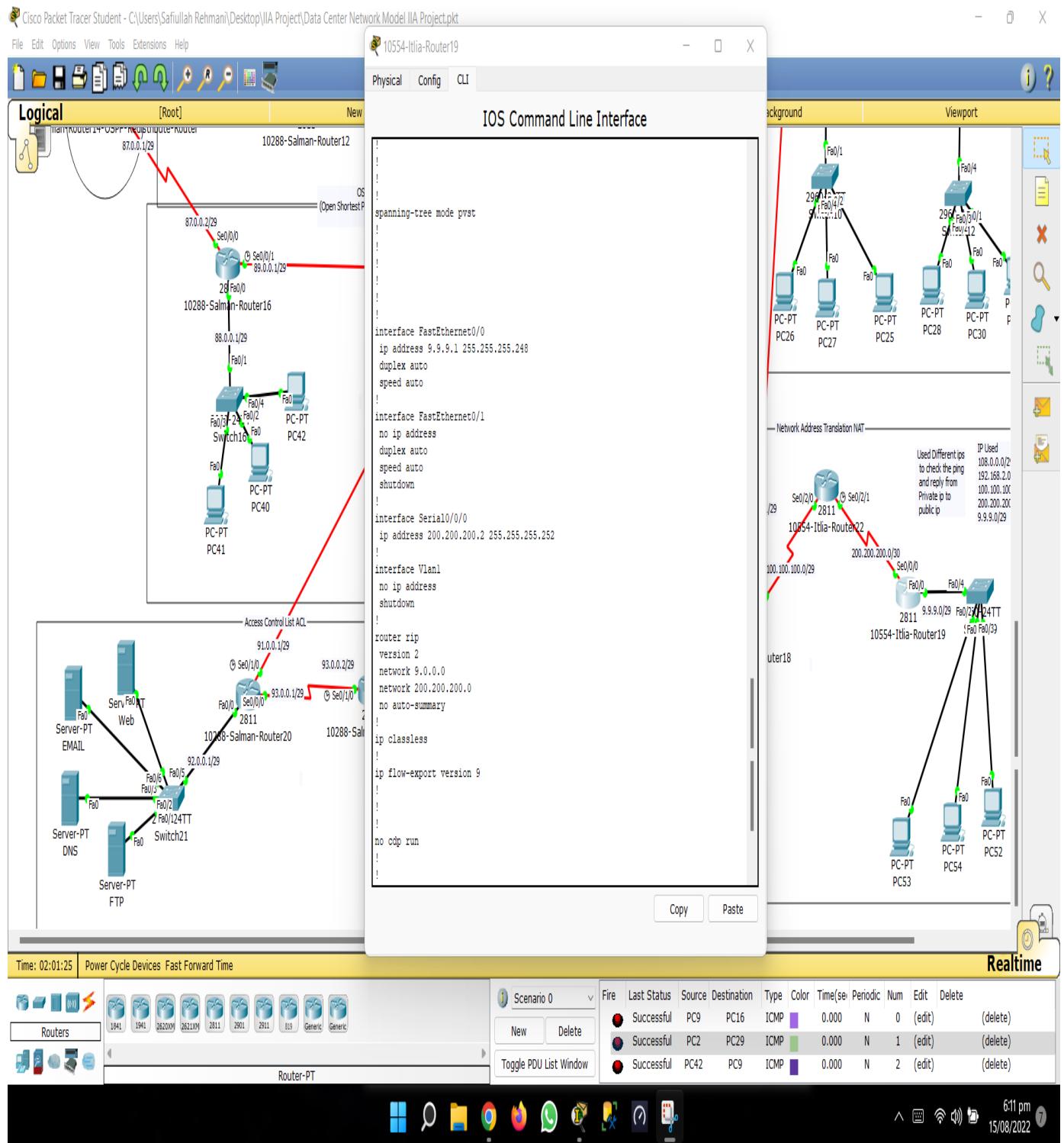
NAT Router 18:-

Show Running Config:-



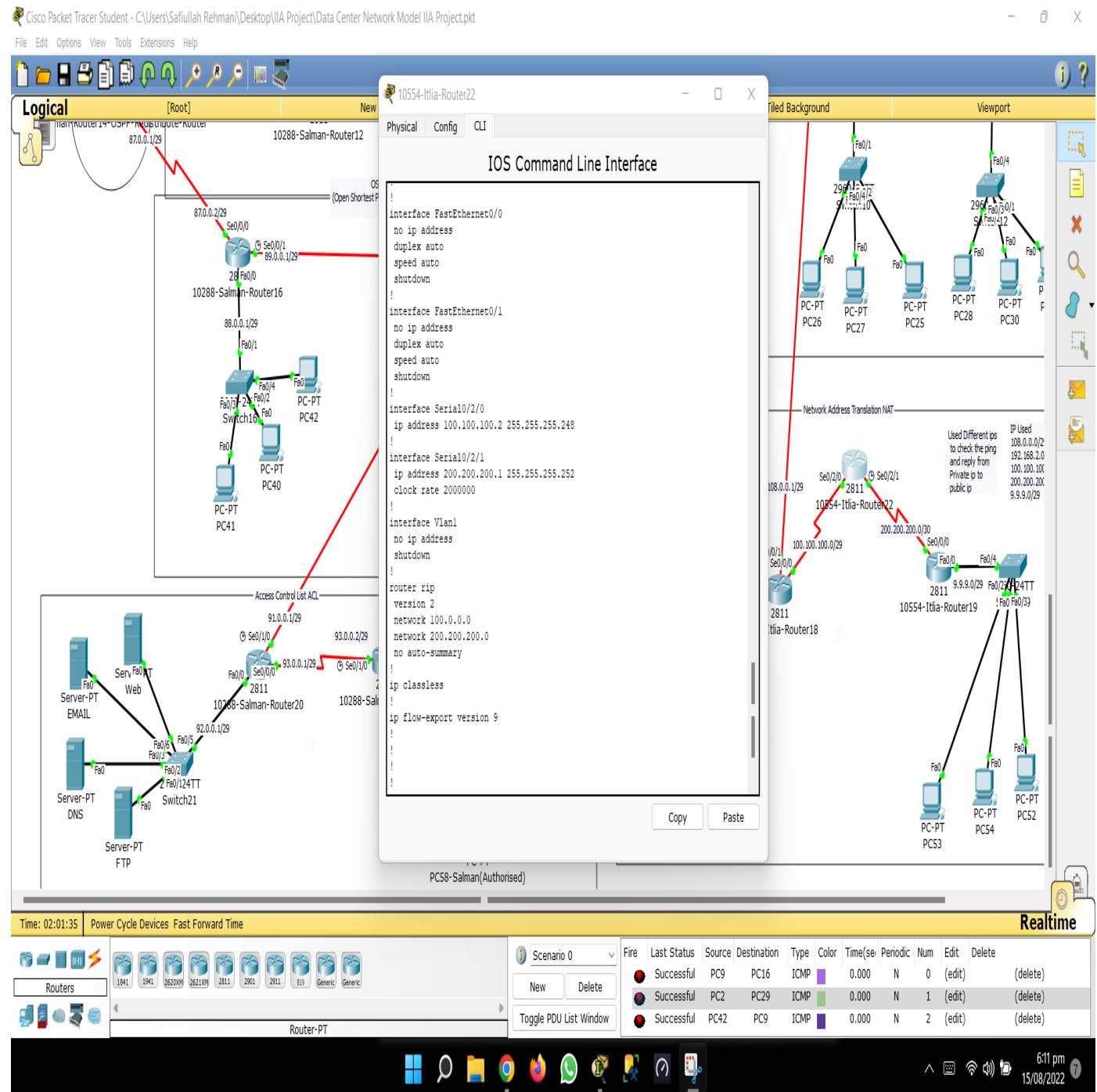
NAT Router 19:-

Show Running Config:-



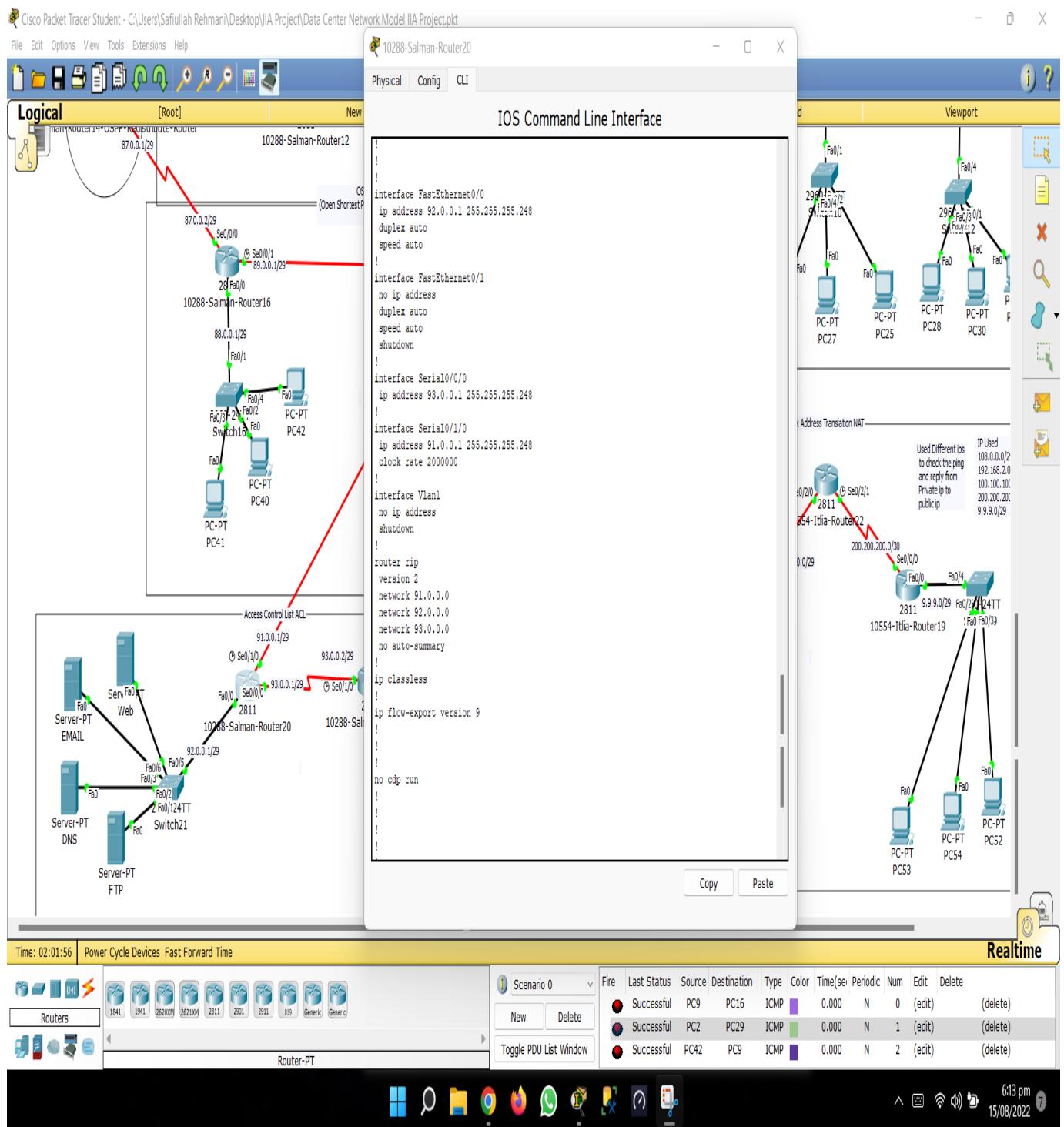
NAT Router 22:-

Show Running Config:-



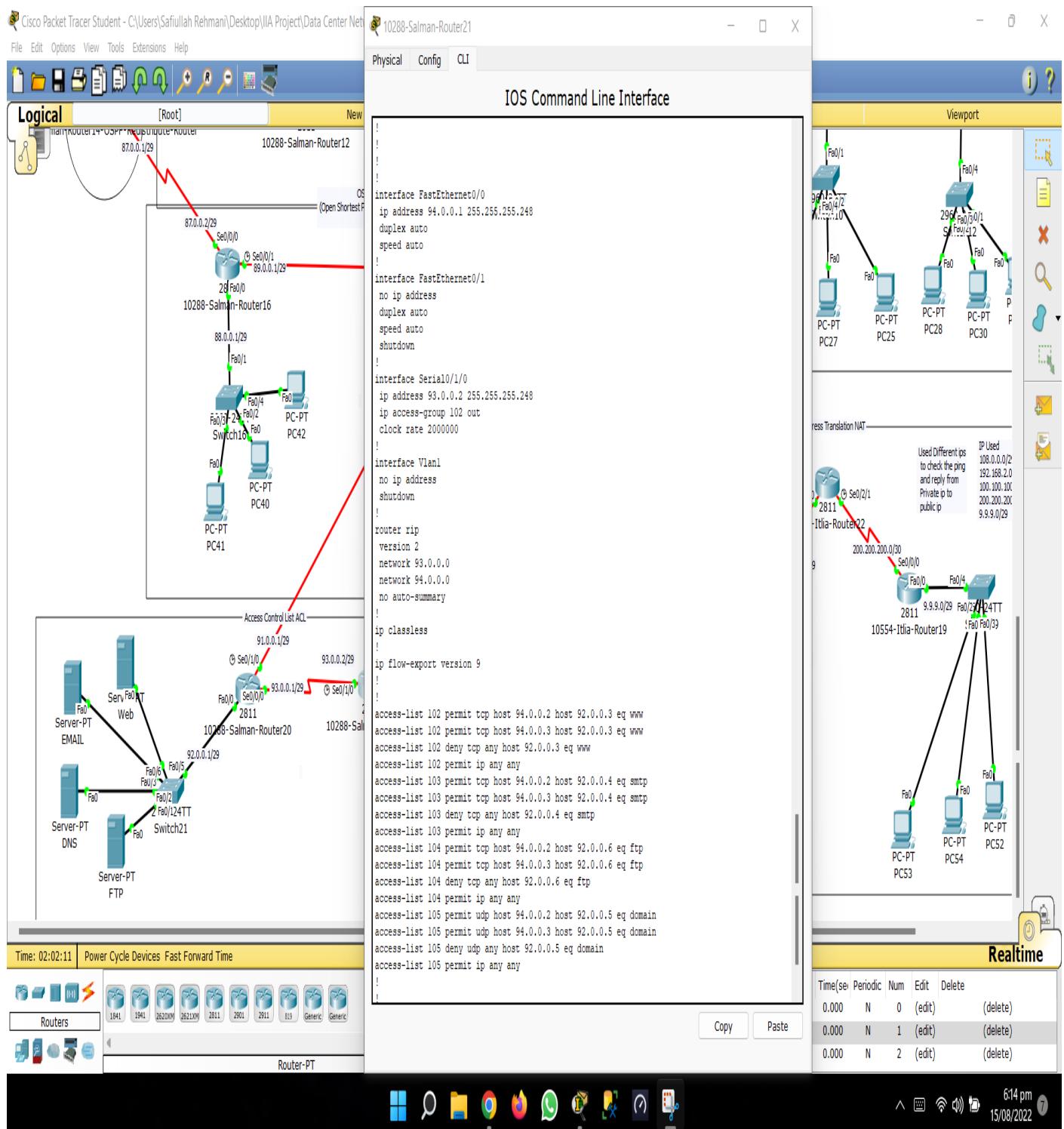
ACL Router 20:-

Show Running Config:-



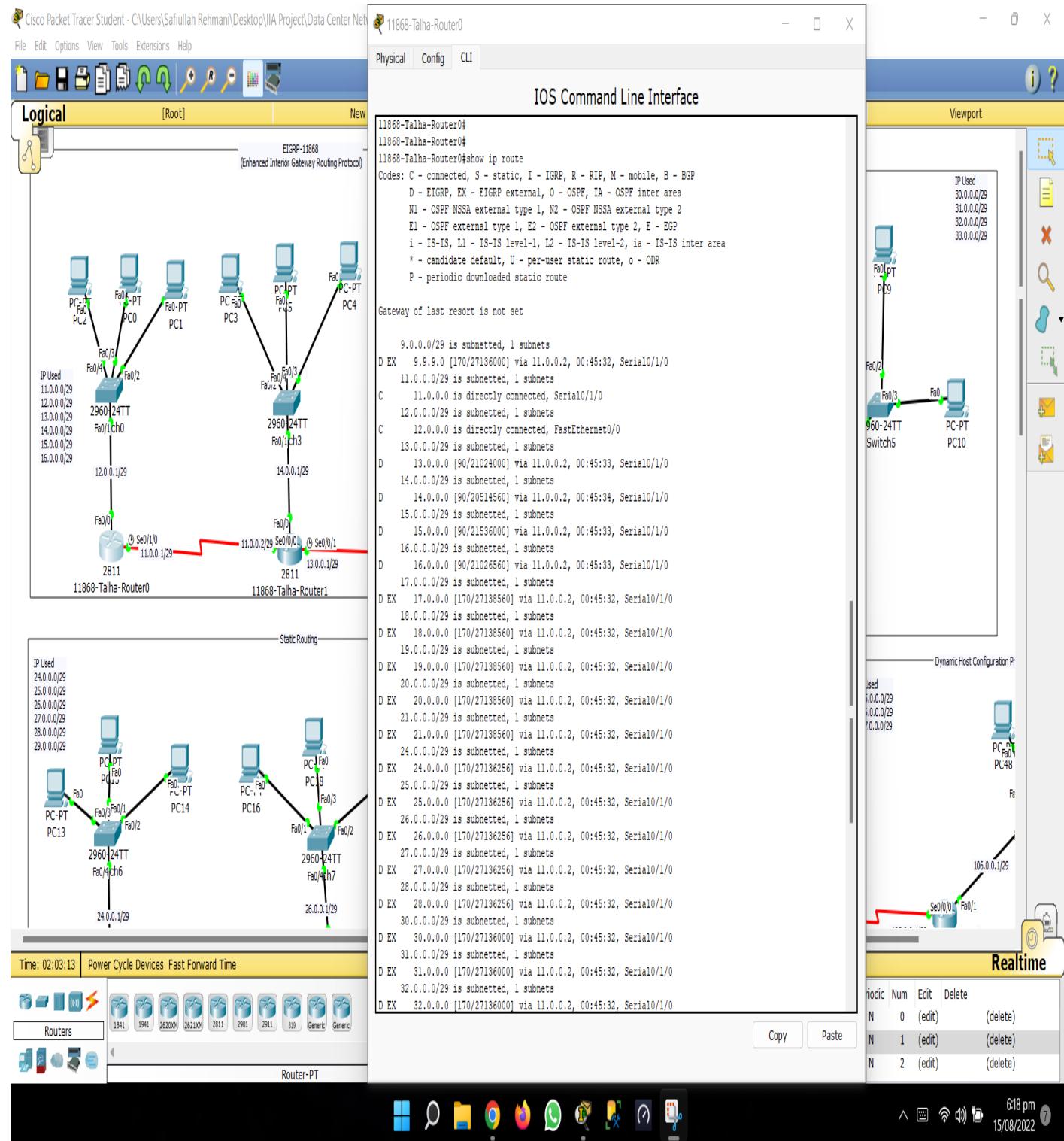
ACL Router 21:-

Show Running Config:-

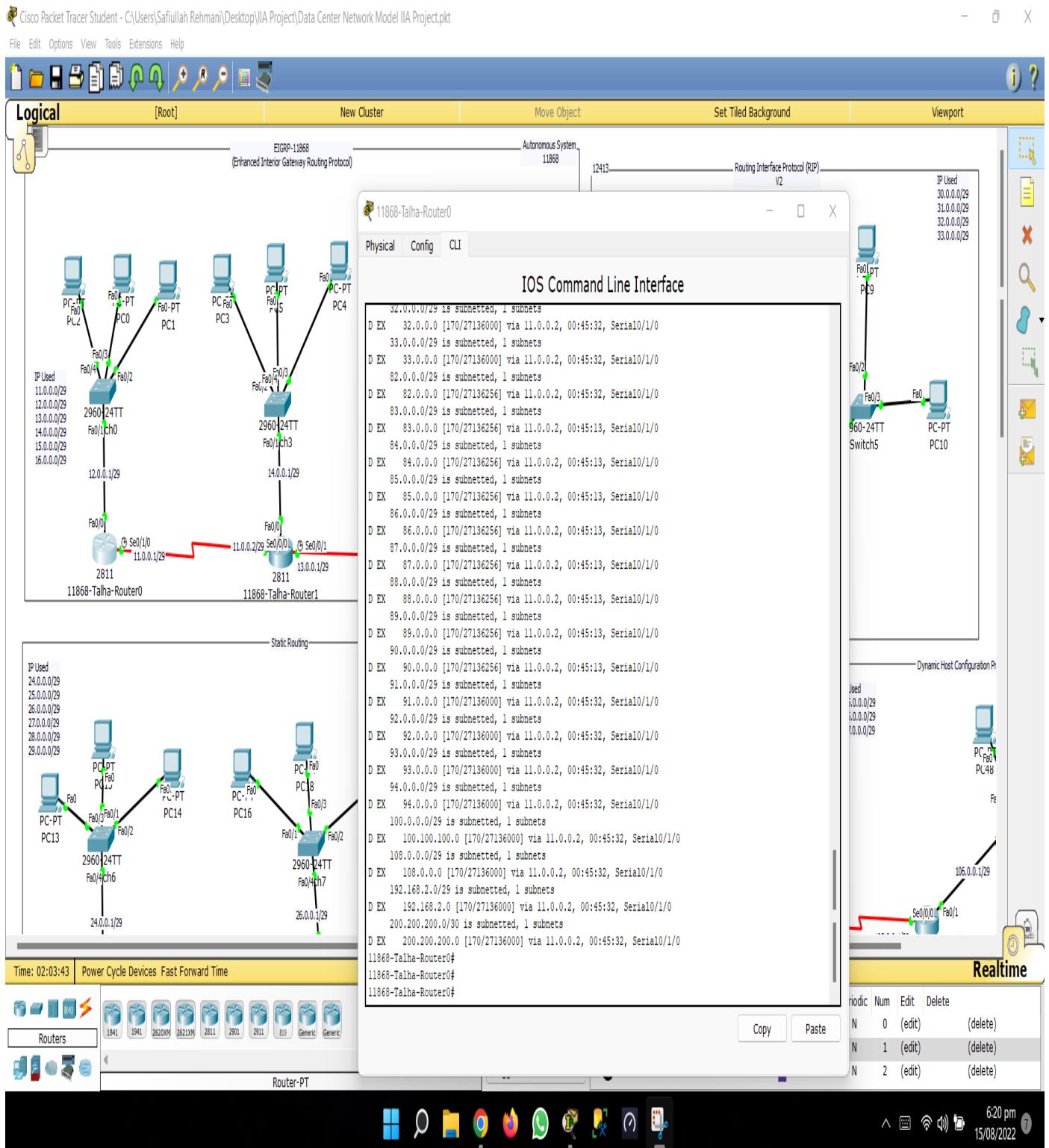


EIGRP-11868 Router 0:-

Show IP Route:-

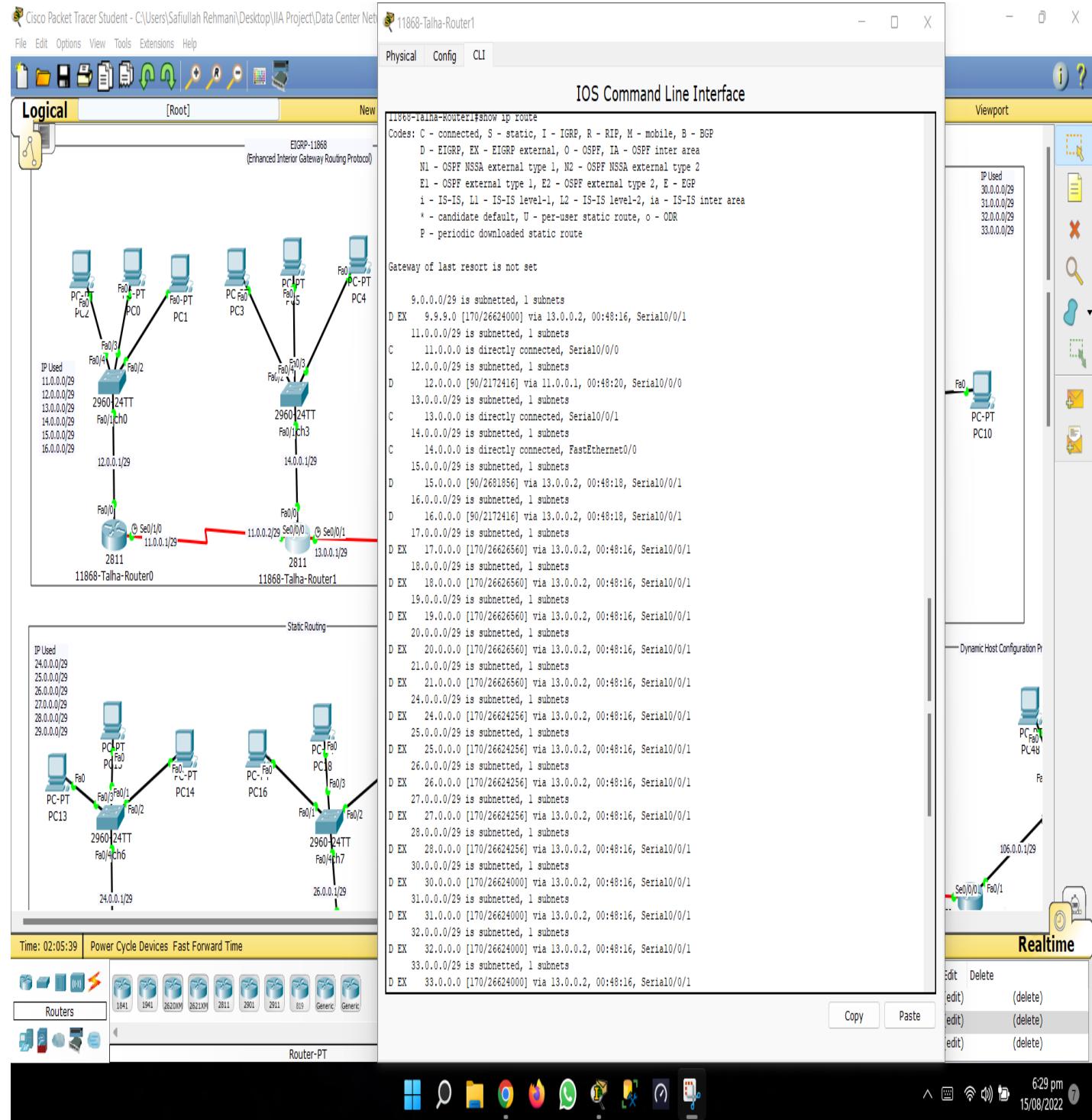


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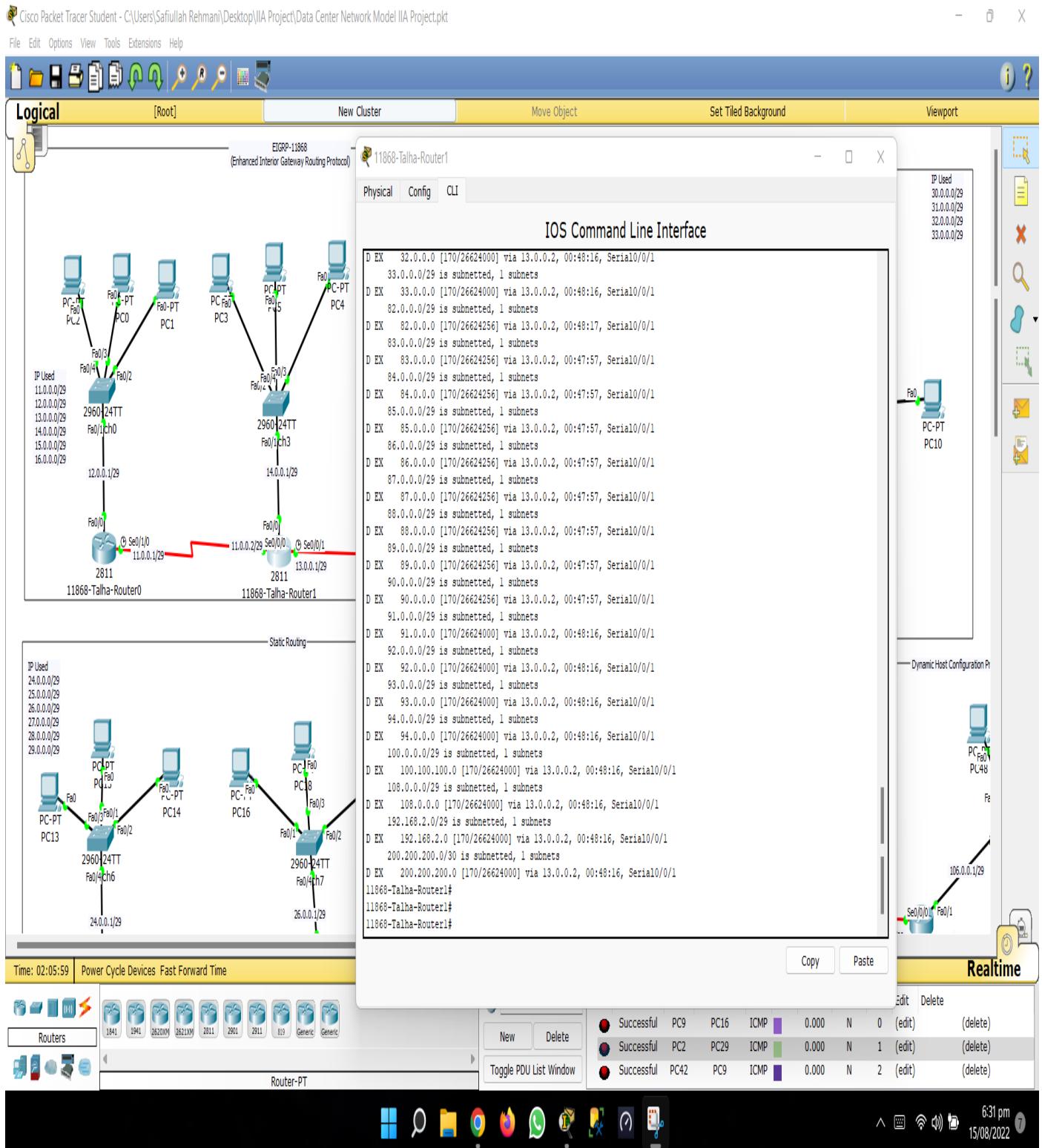


EIGRP-11868 Router 1:-

Show IP Route:-

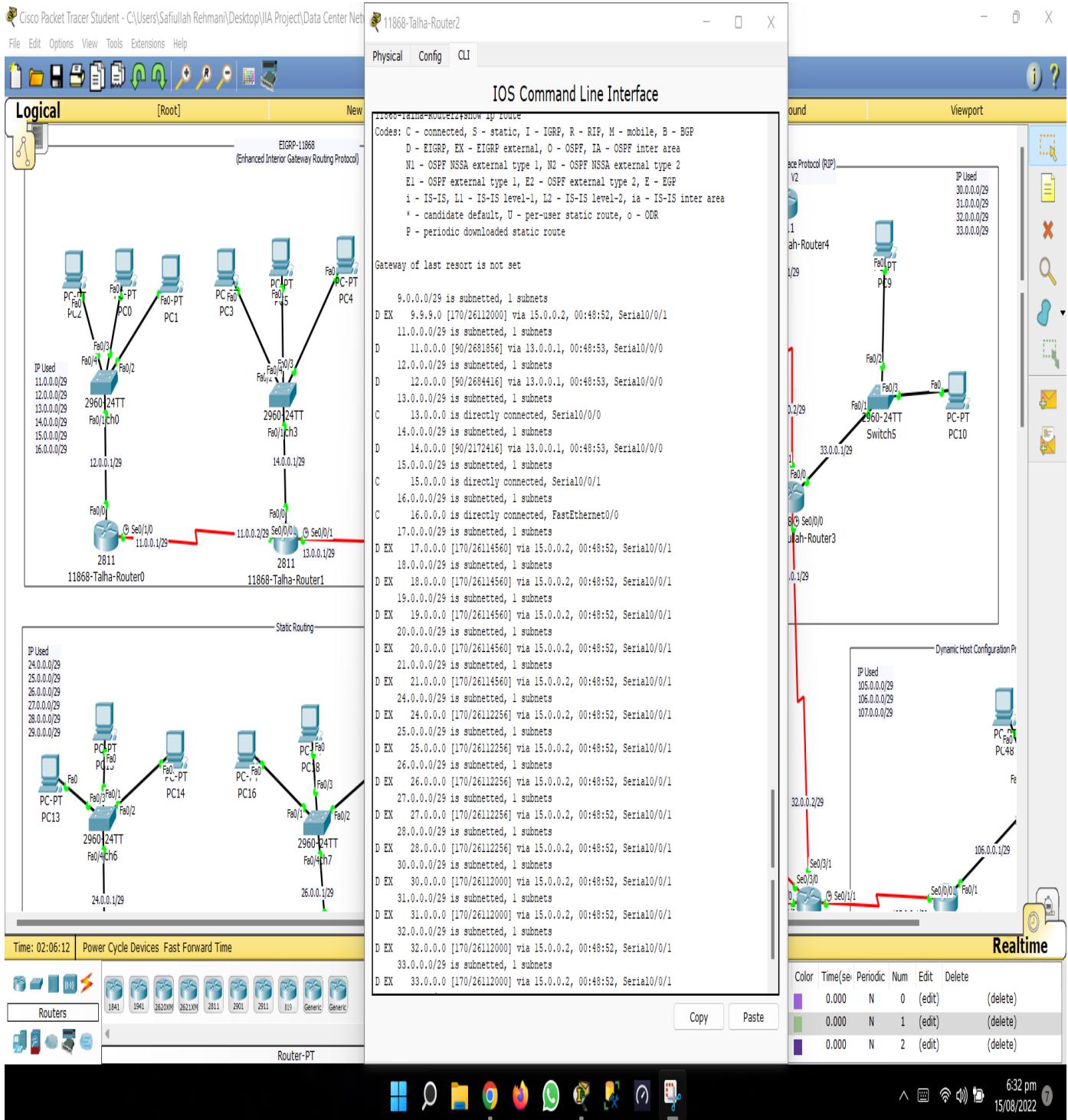


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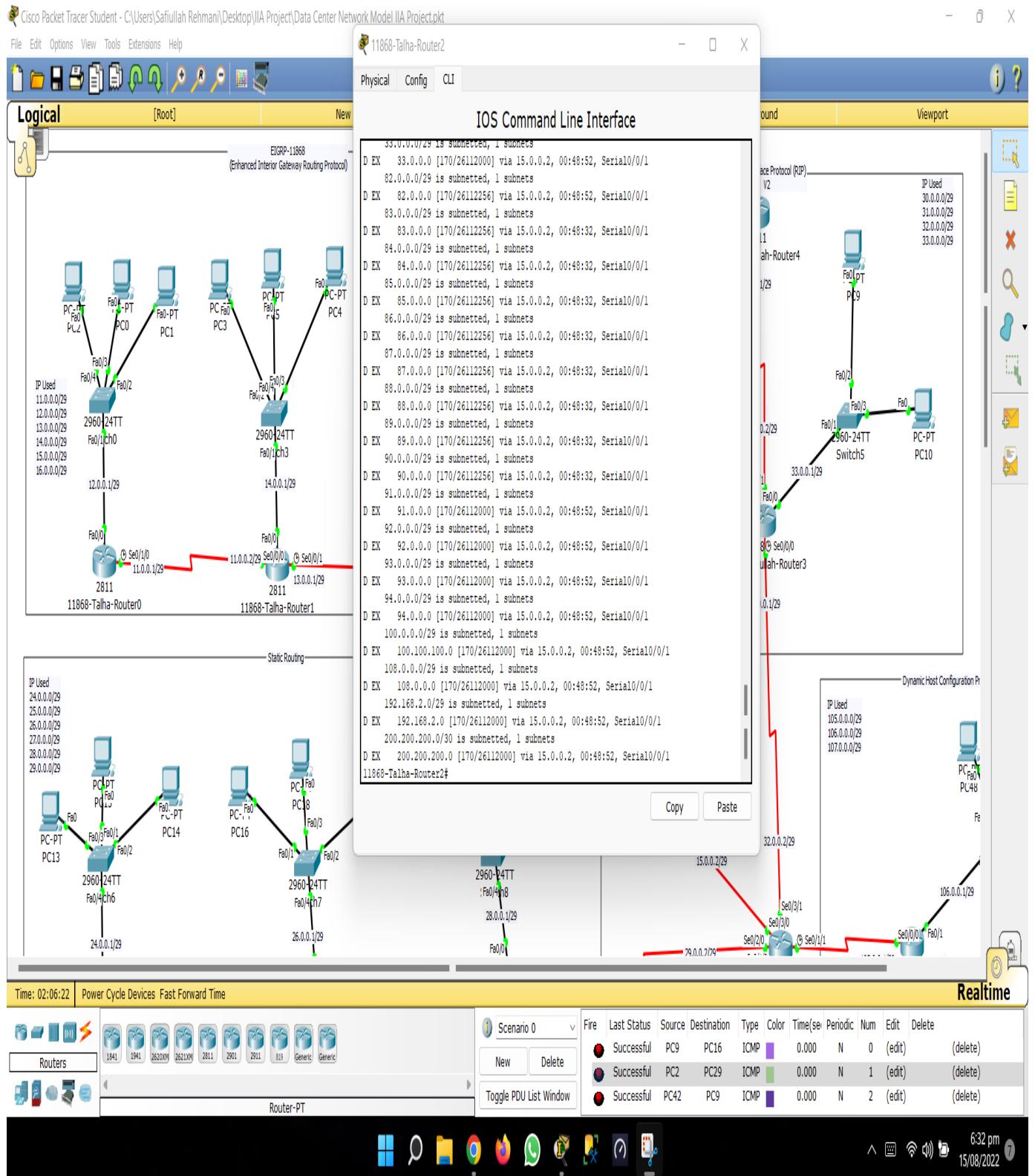


EIGRP-11868 Router 2:-

Show IP Route:-

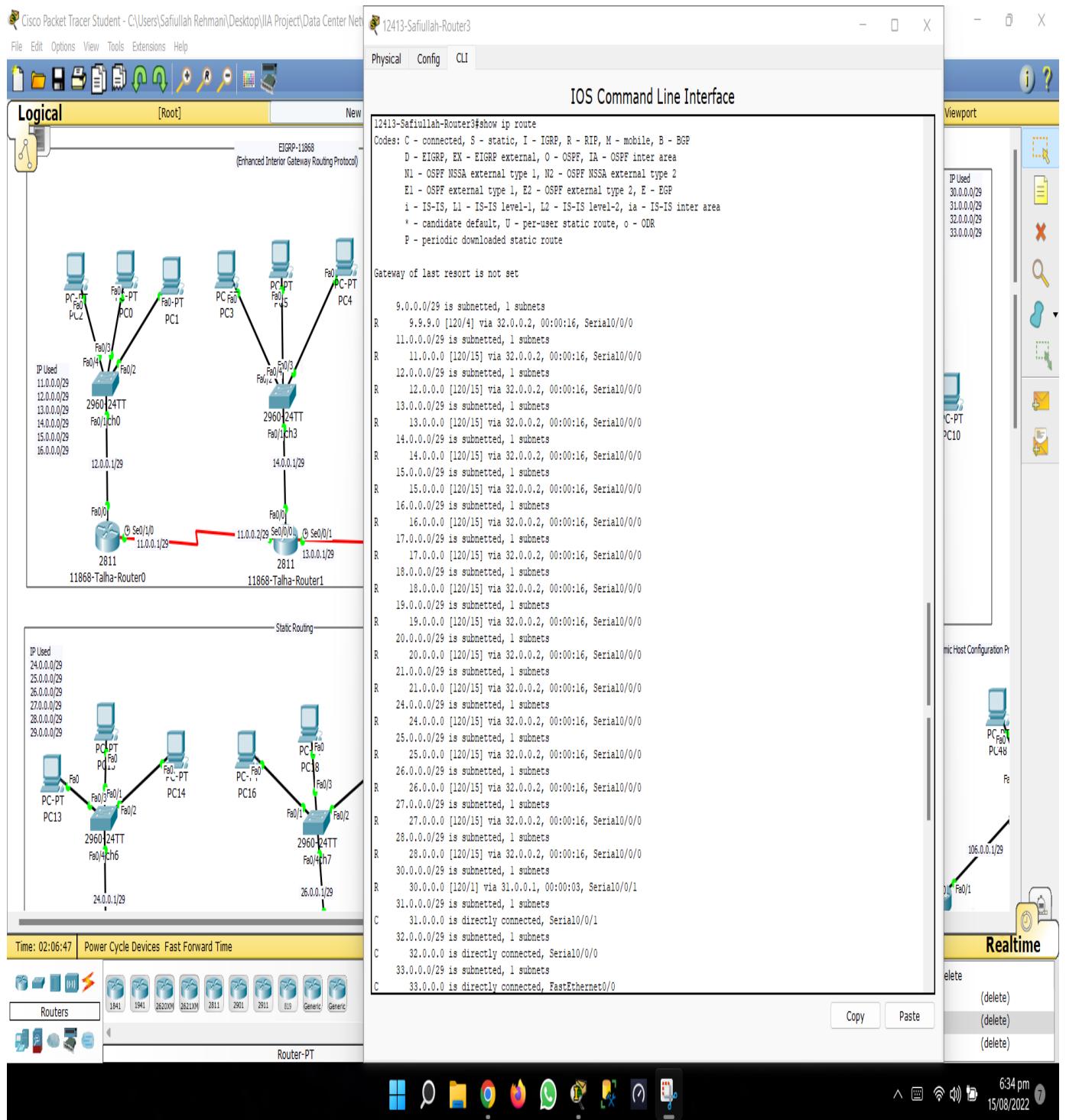


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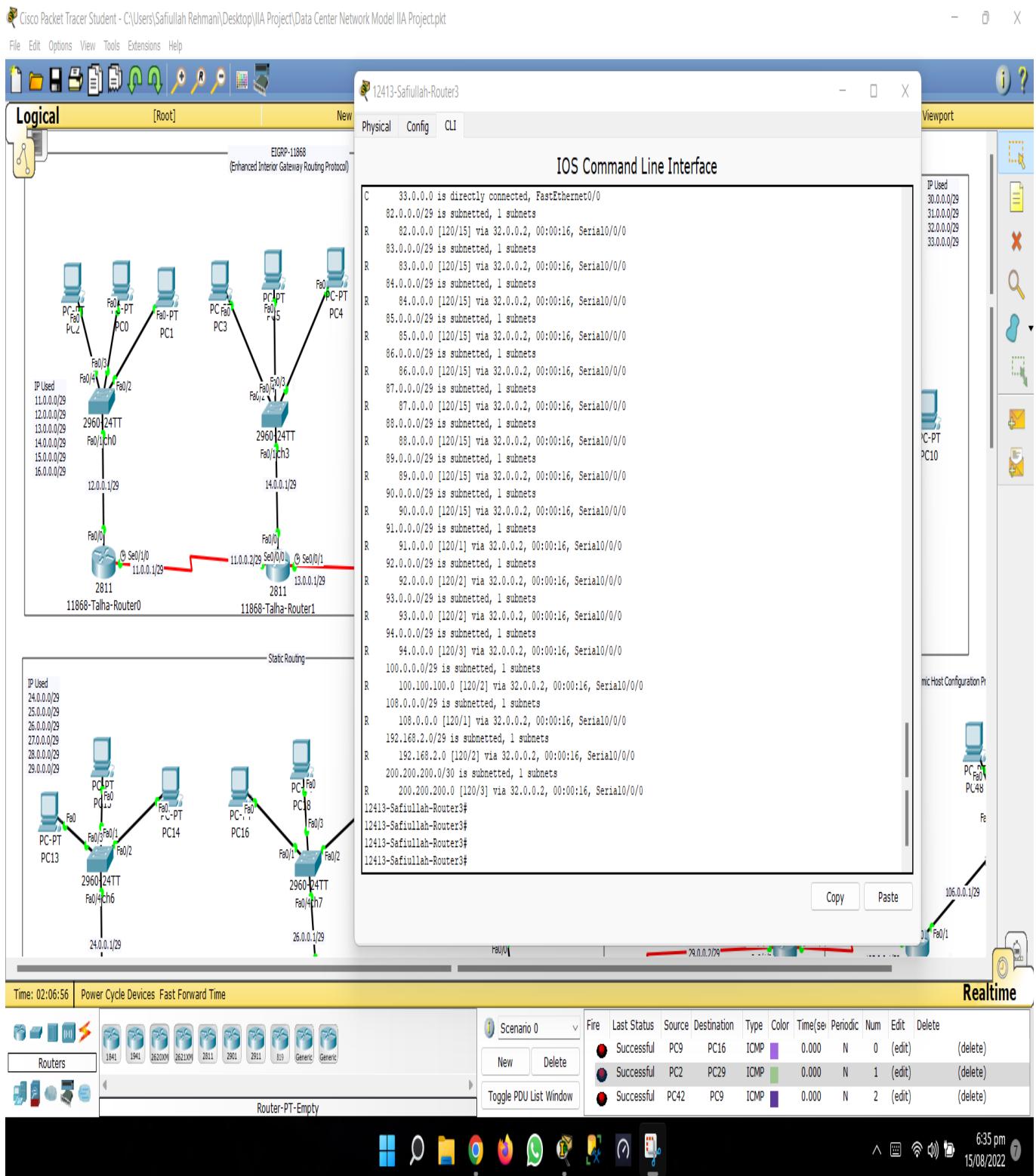


RIP-V2 Router 3:-

Show IP Route:-

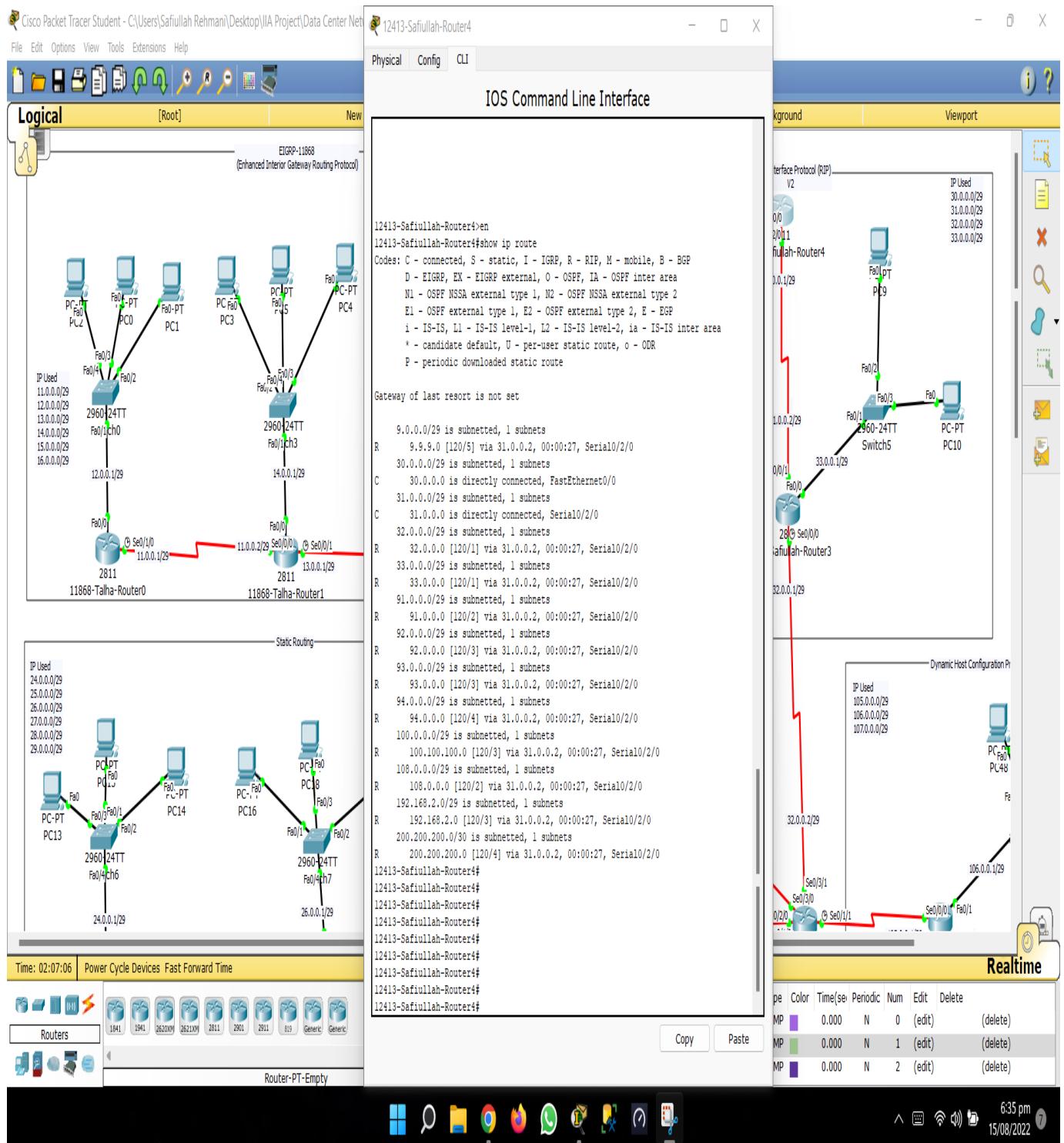


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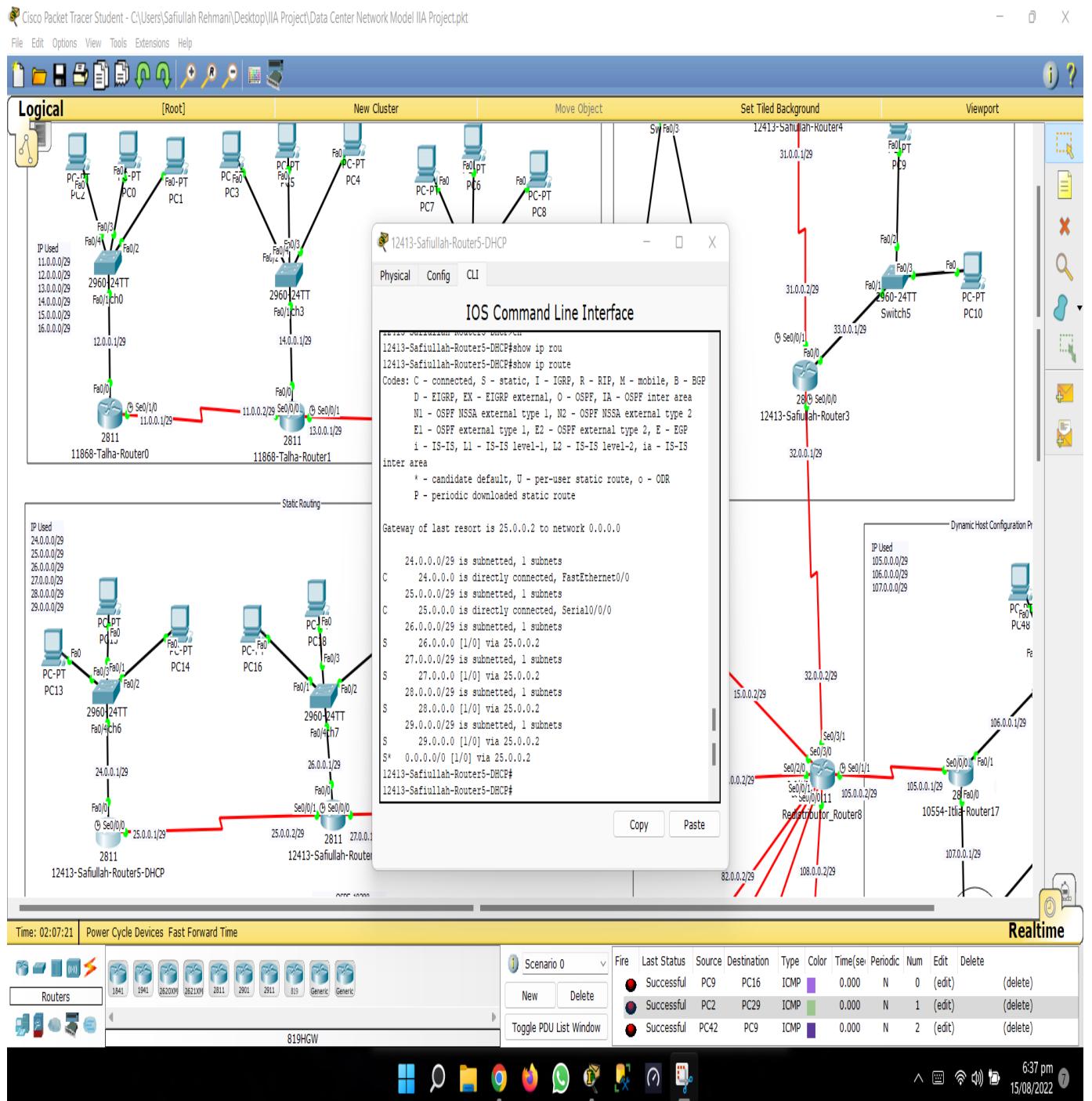
RIP-V2 Router 4:-

Show IP Route:-



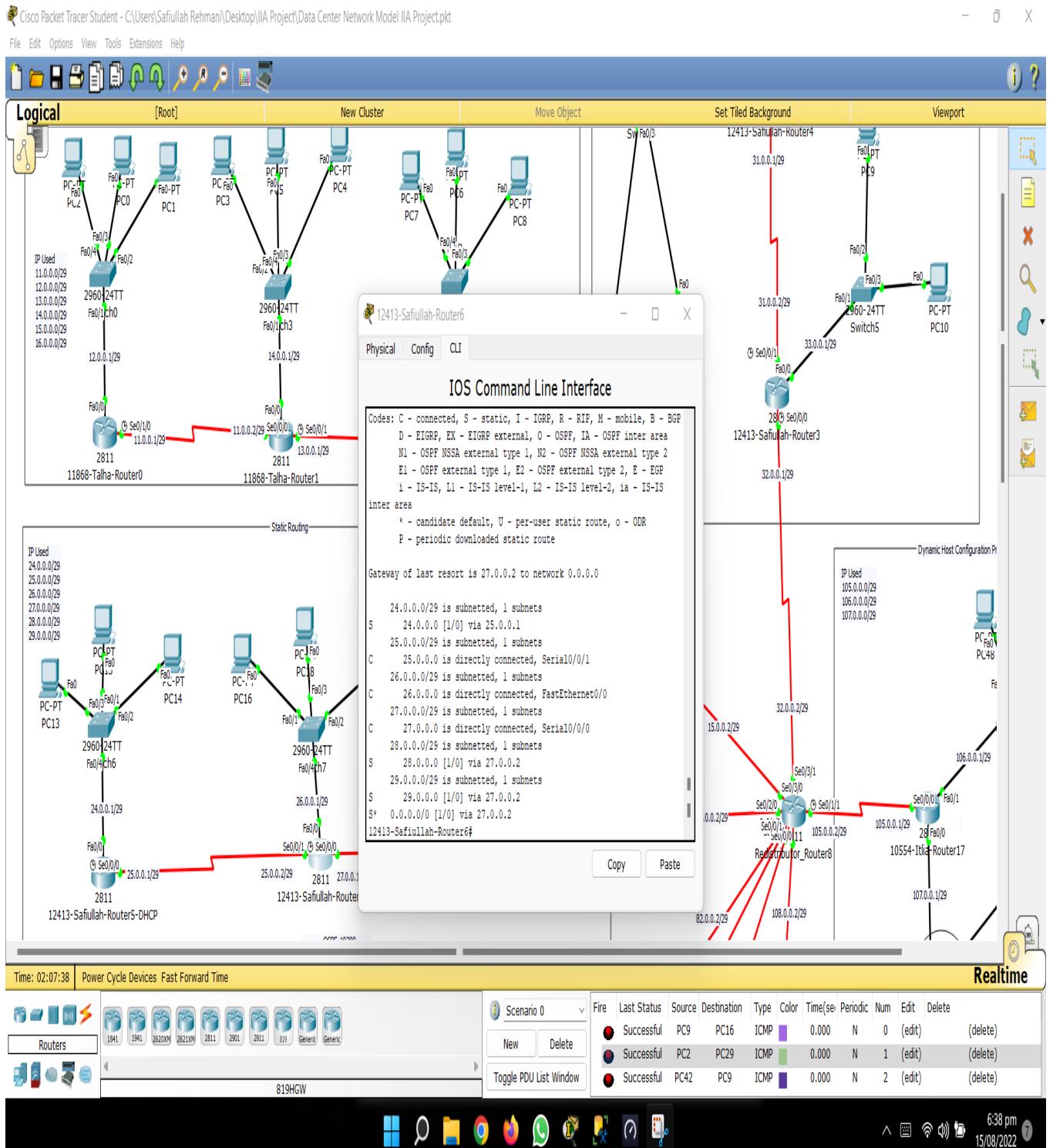
Static Router 5:-

Show IP Route:-



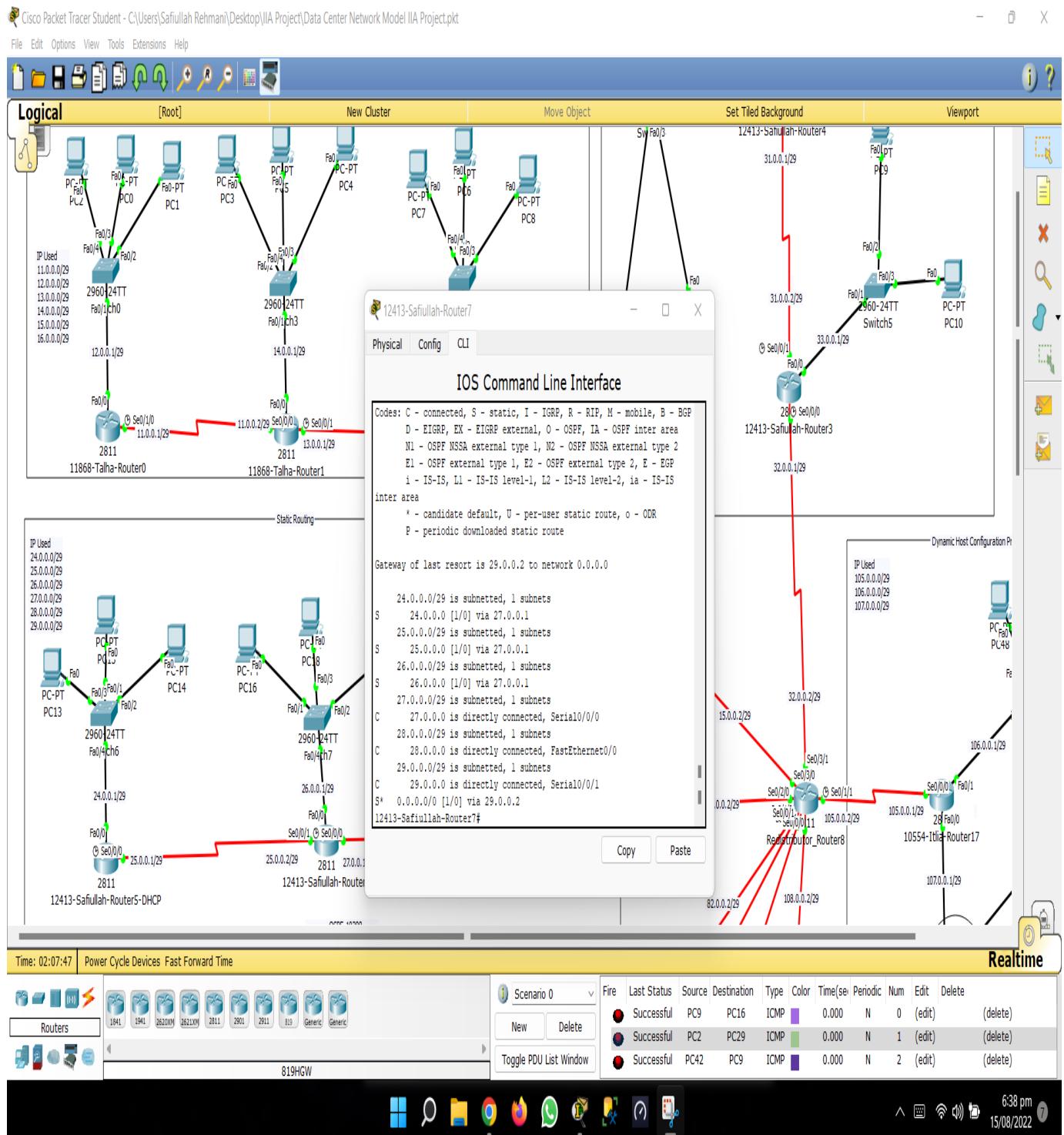
Static Router 6:-

Show IP Route:-



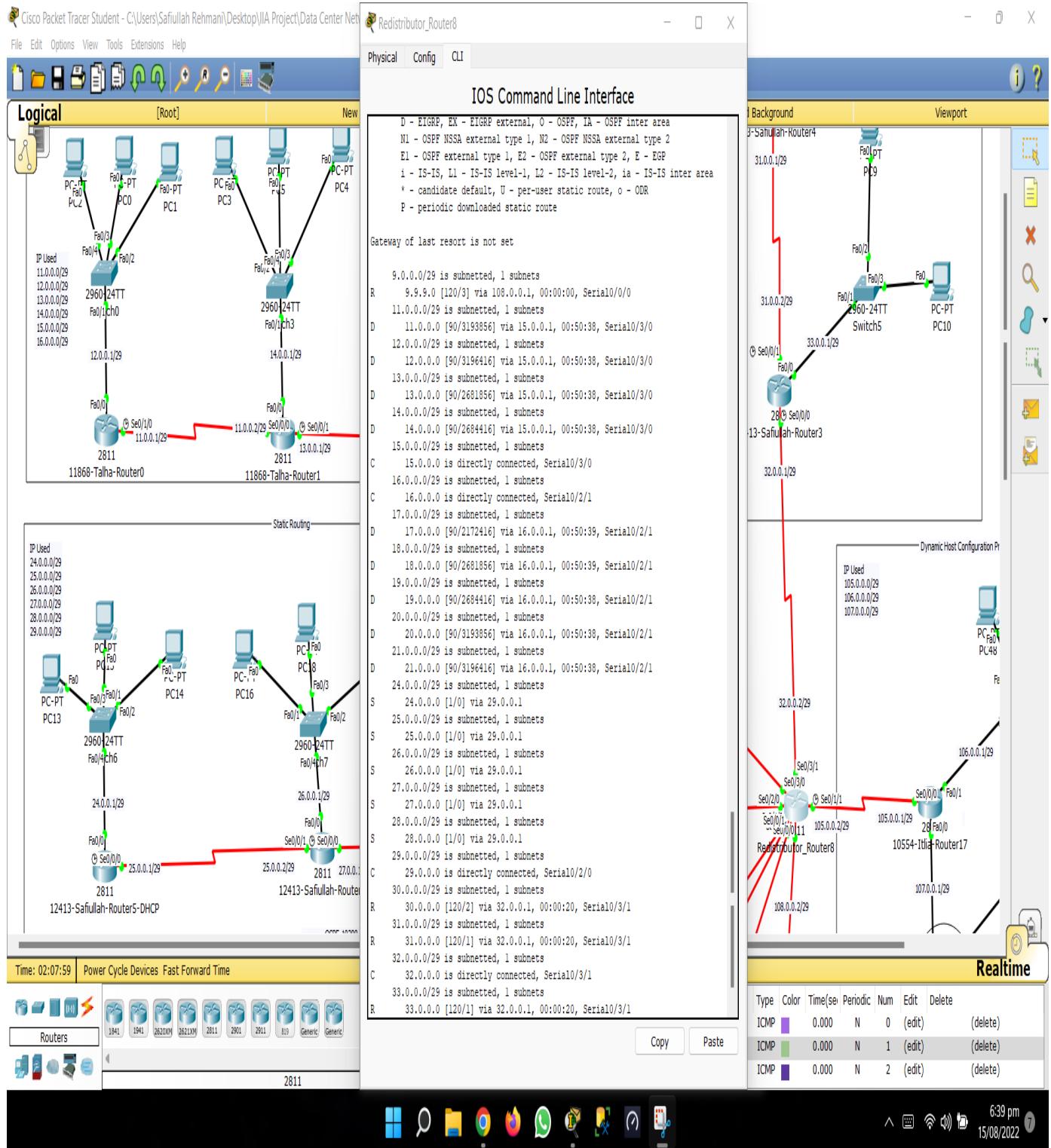
Static Router 7:-

Show IP Route:-

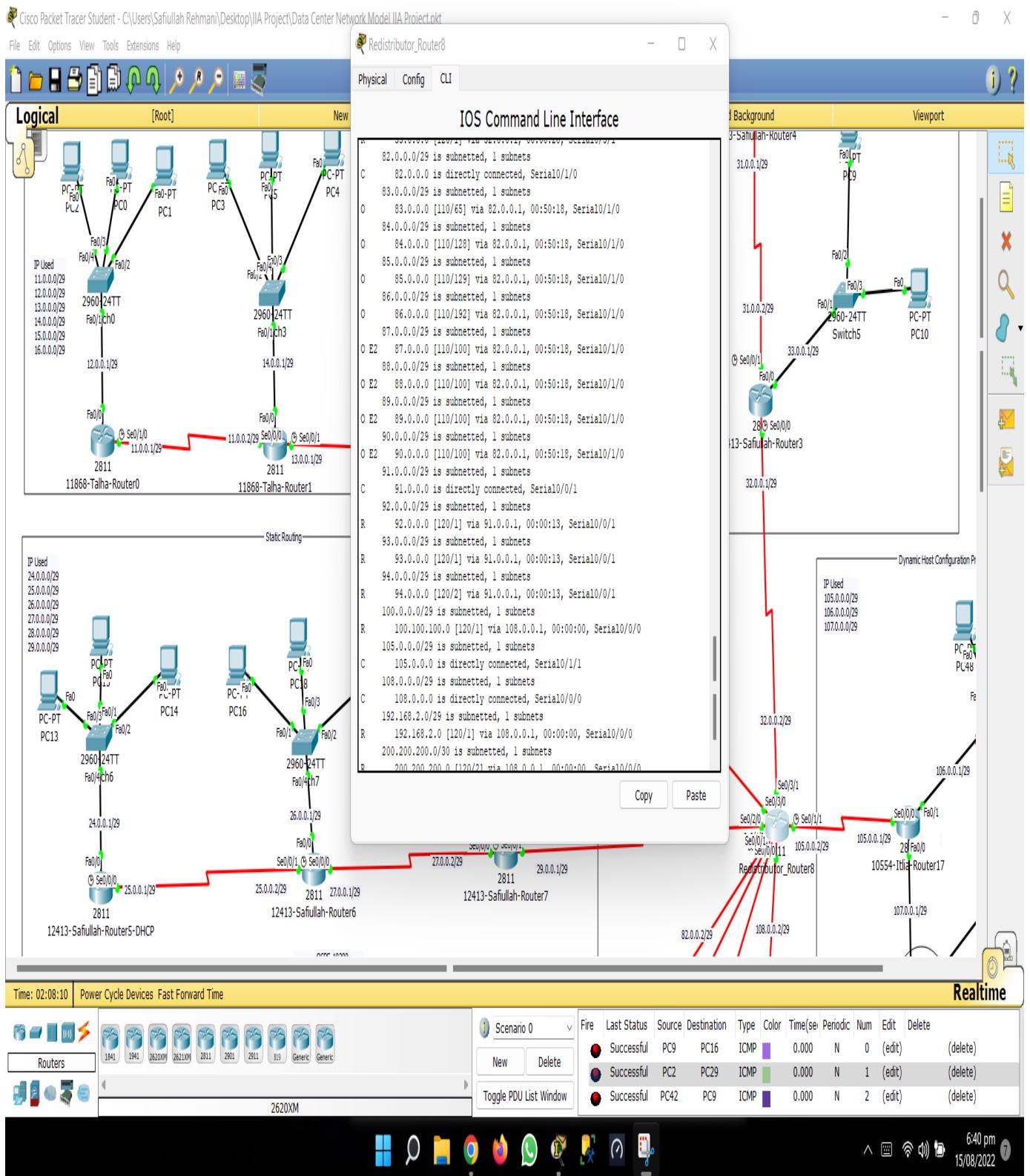


Main Redistributor Router 8:-

Show IP Route:-

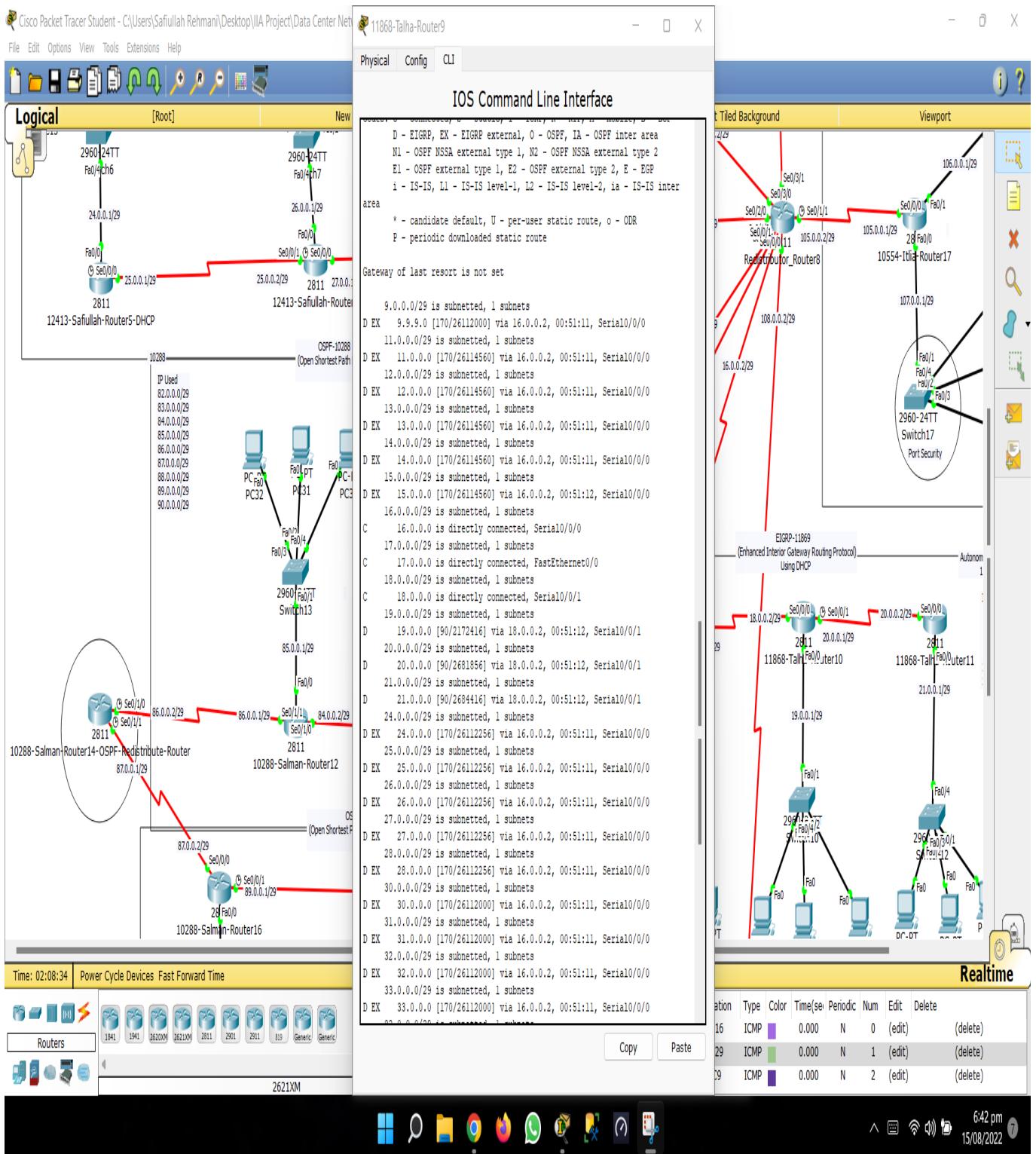


Continued....

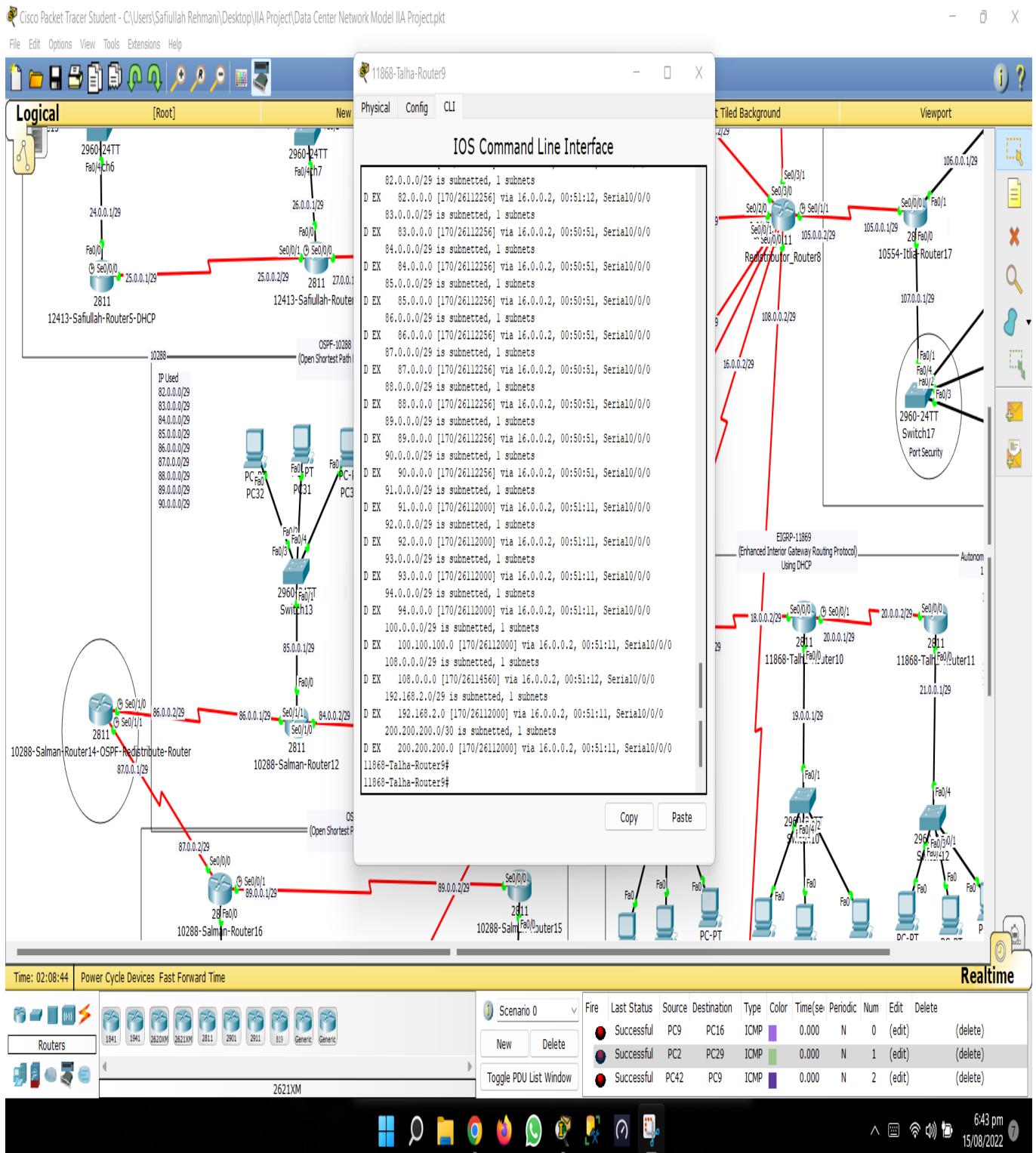


EIGRP-11869 By DHCP Router 9:-

Show IP Route:-

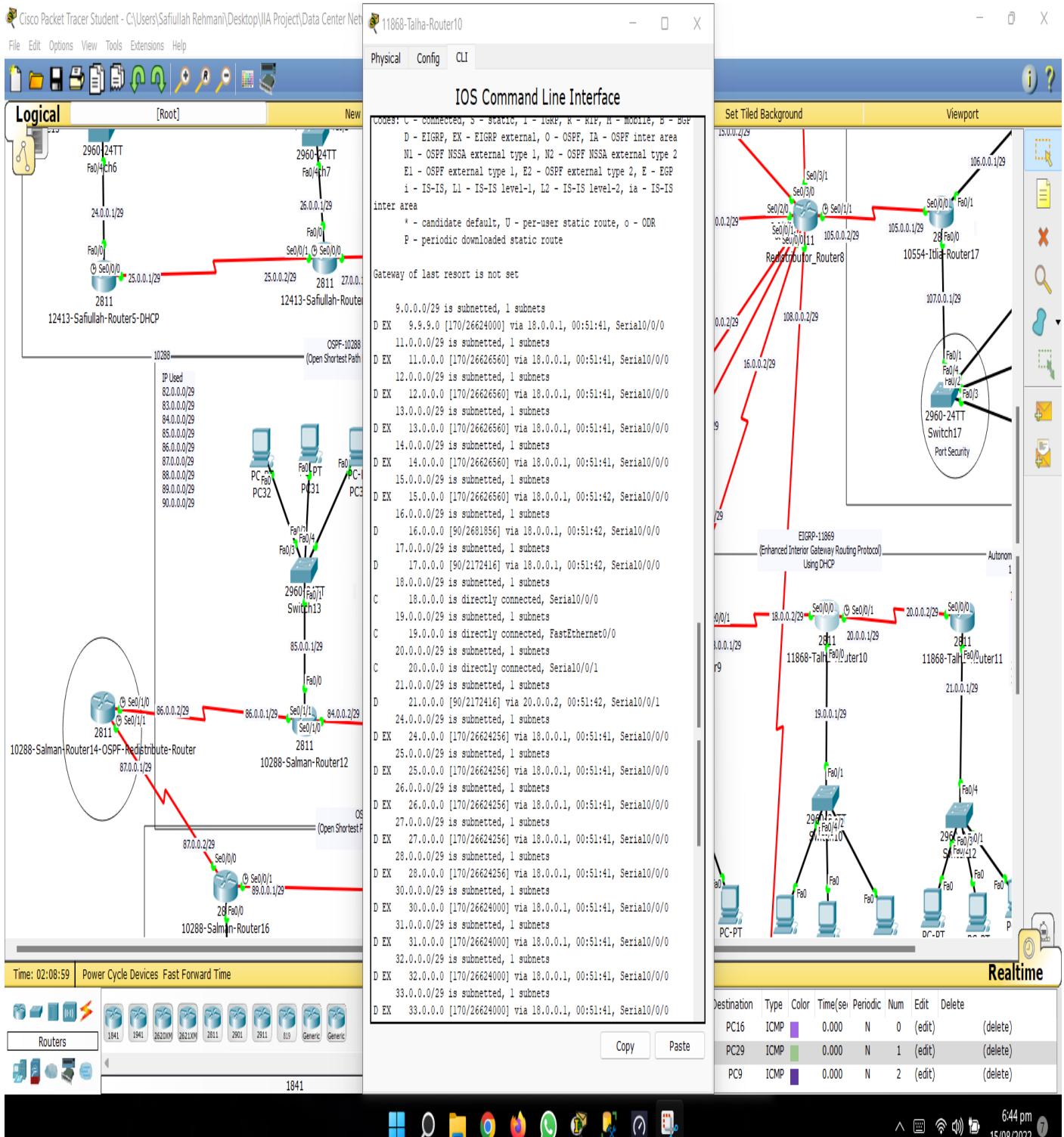


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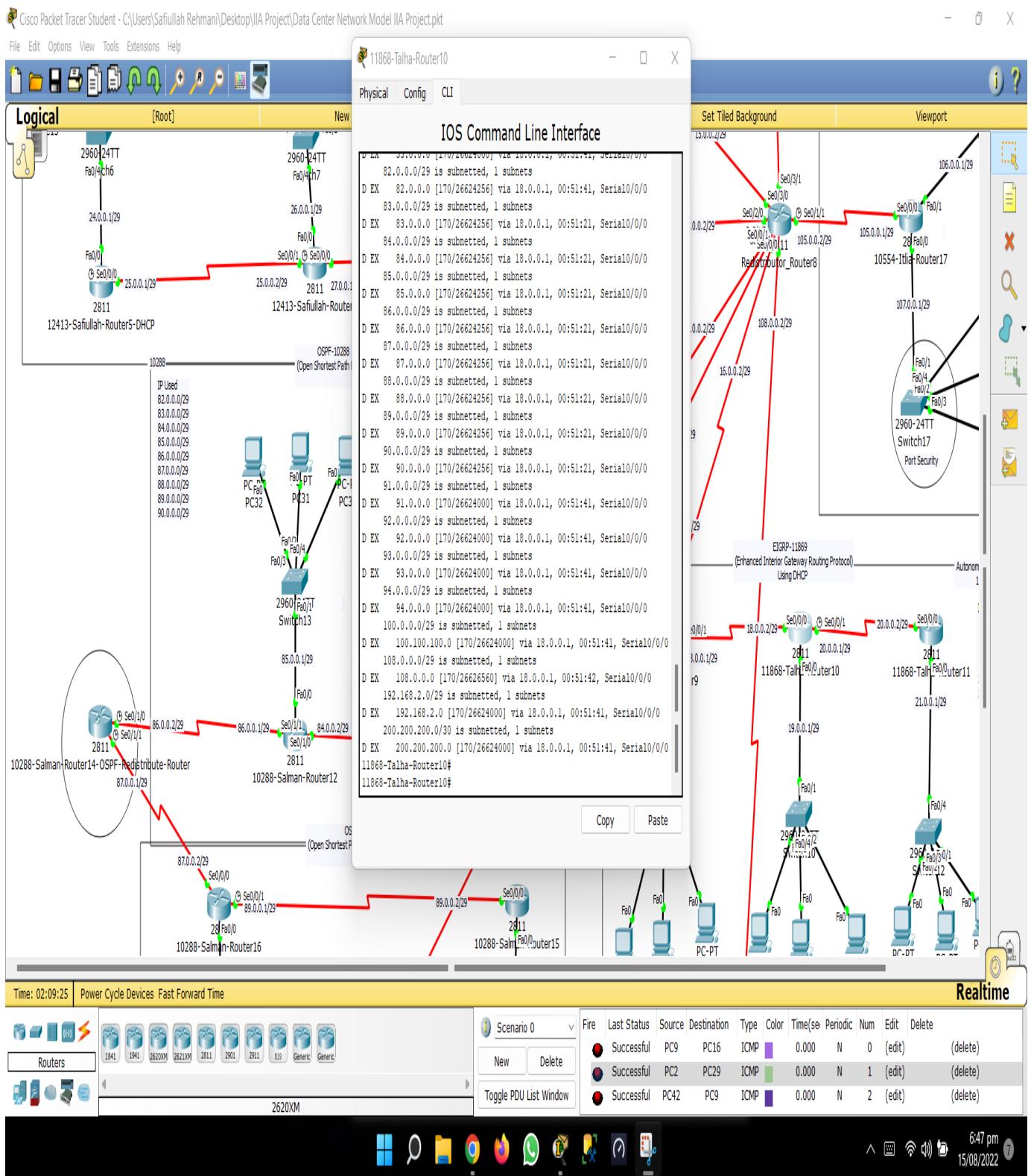


EIGRP-11869 By DHCP Router 10:-

Show IP Route:-

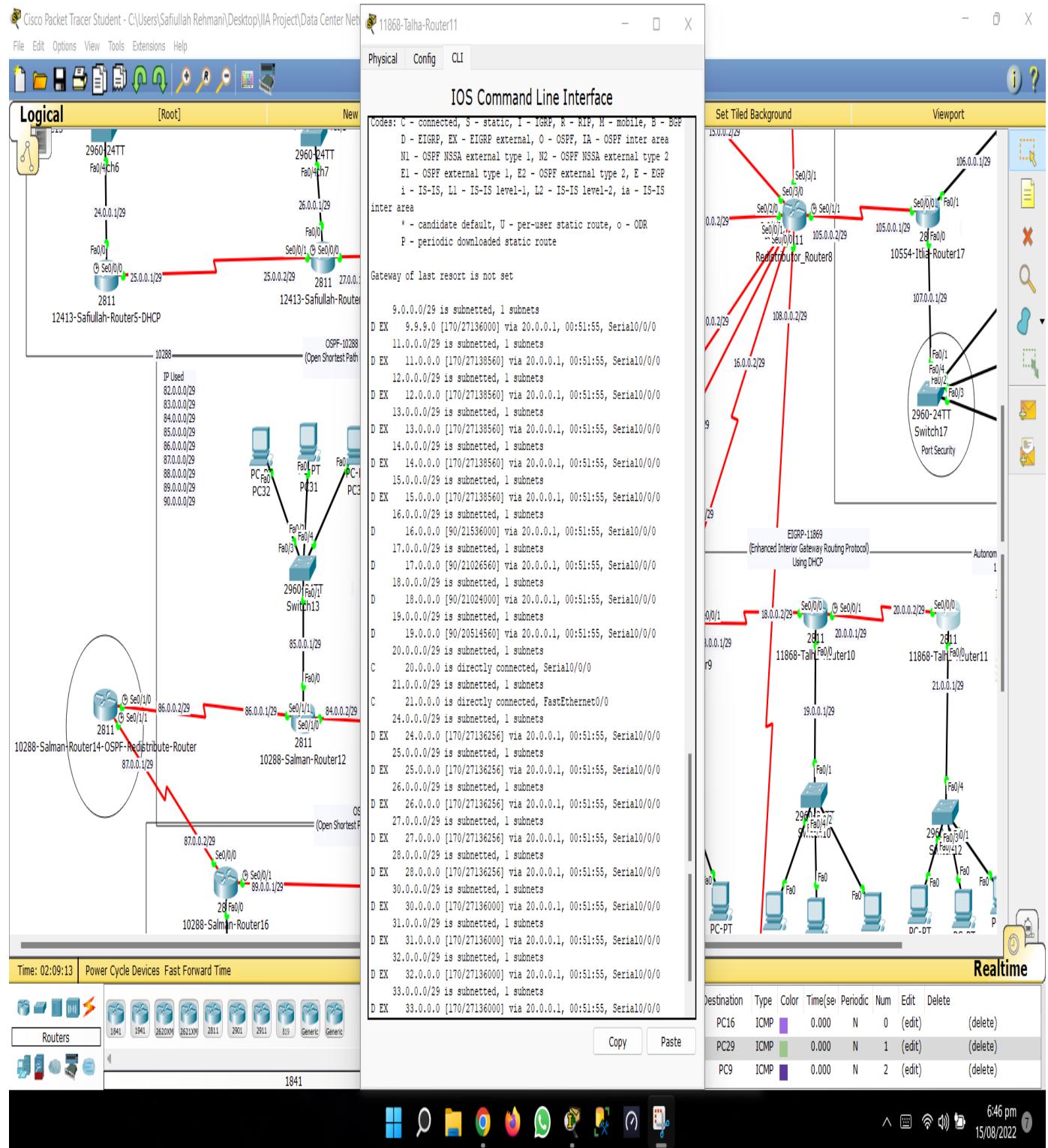


Continued....

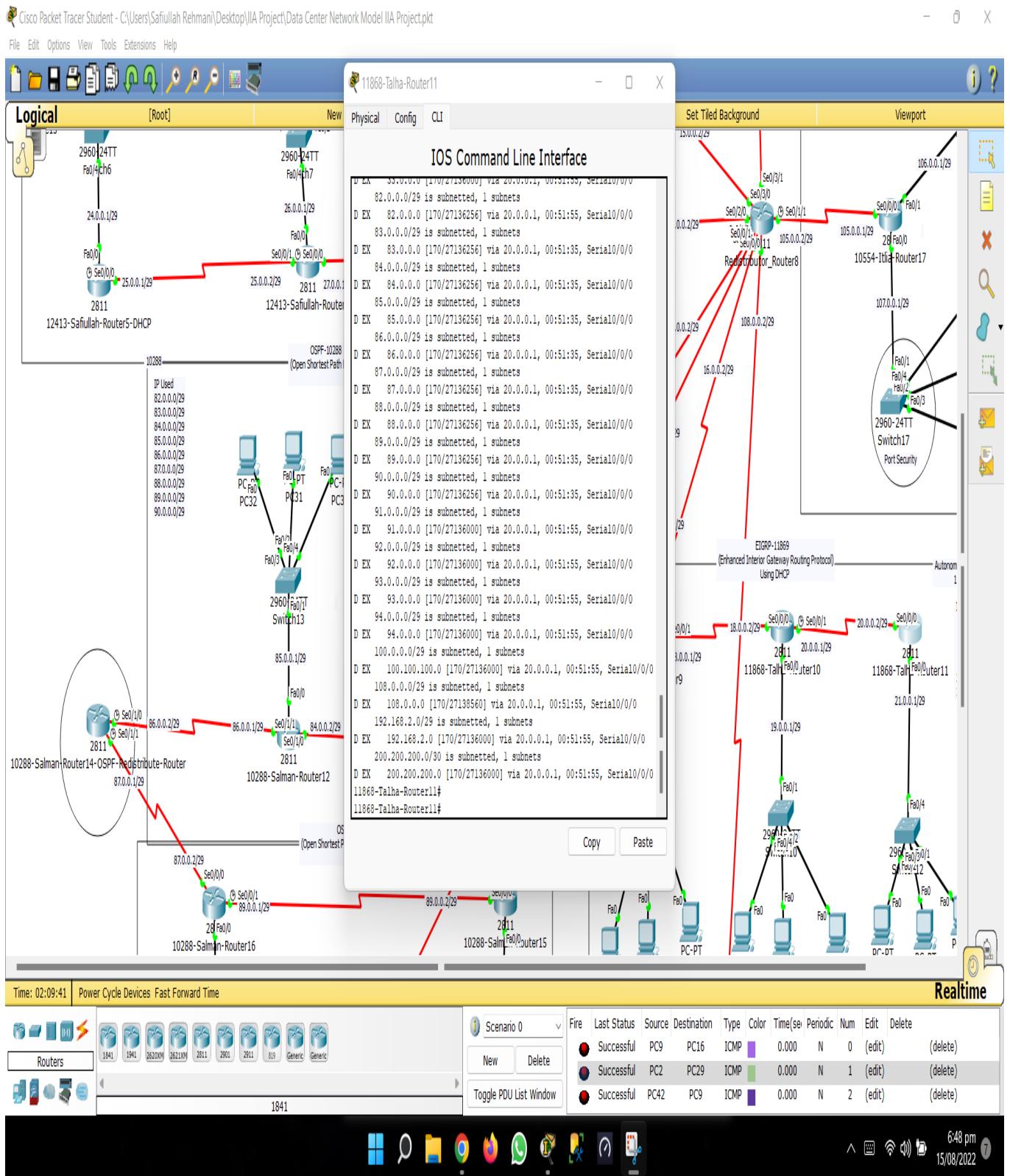


EIGRP-11869 By DHCP Router 11:-

Show IP Route:-

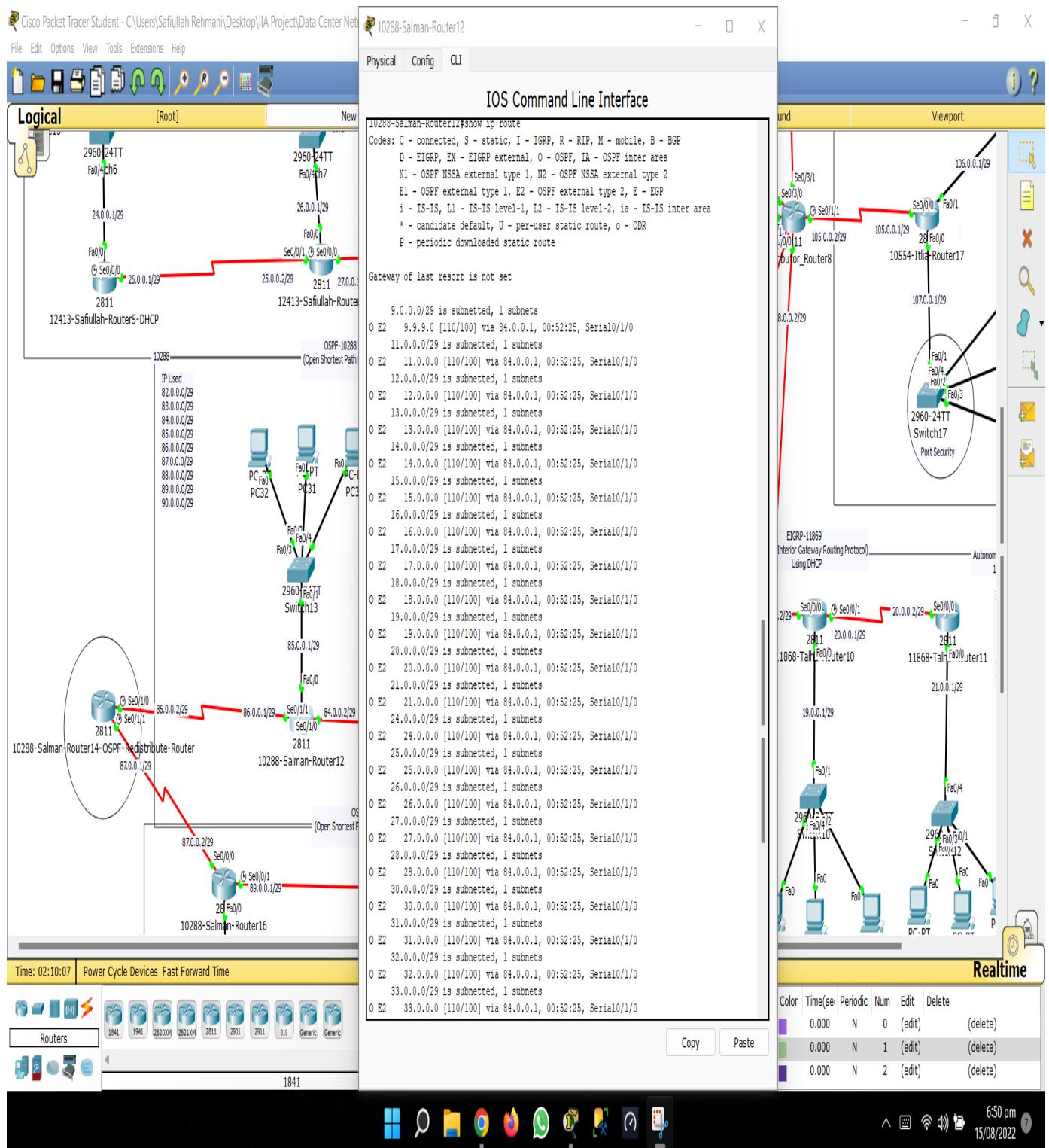


Continued....

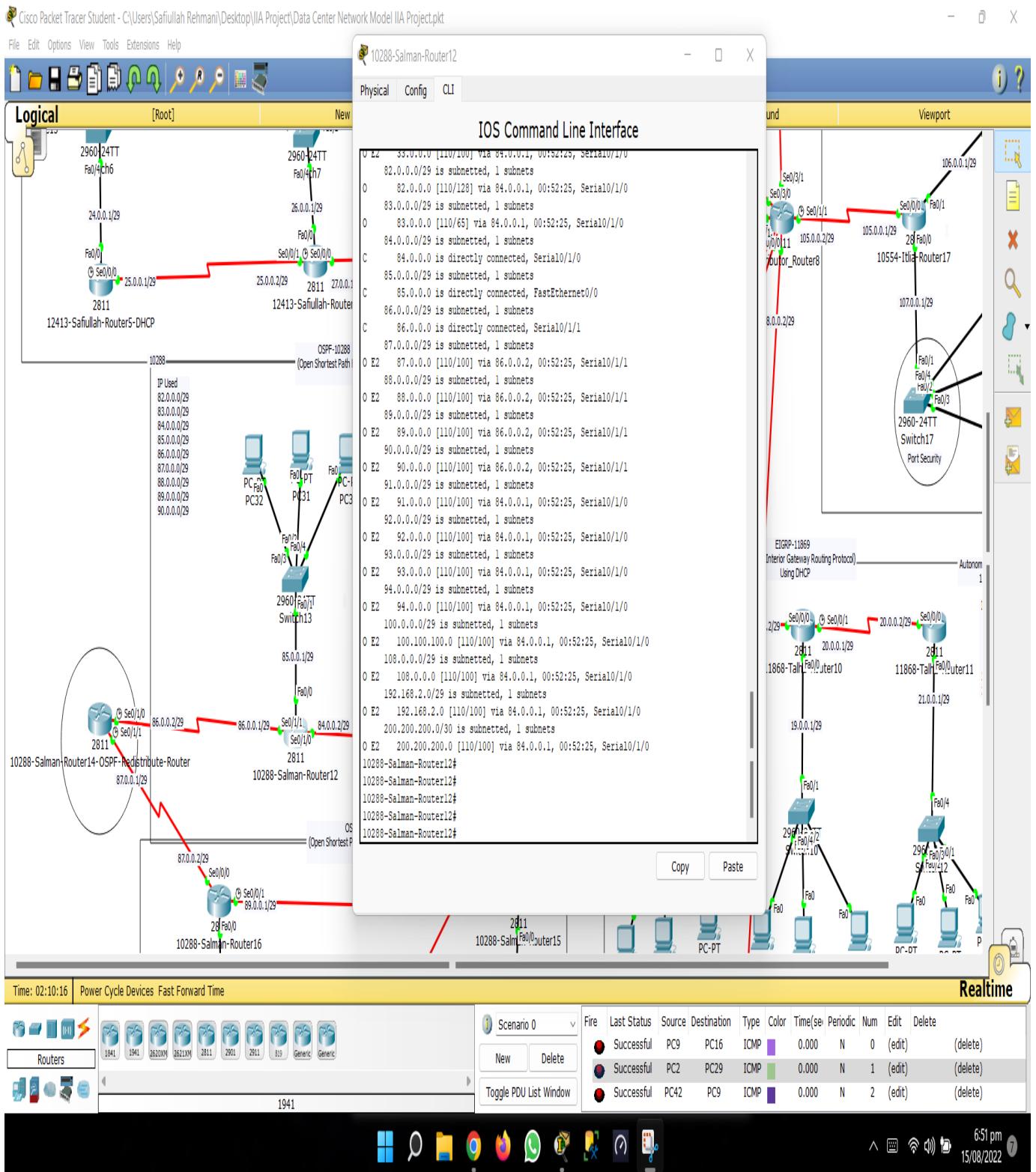


OSPF-10288 Router 12:-

Show IP Route:-

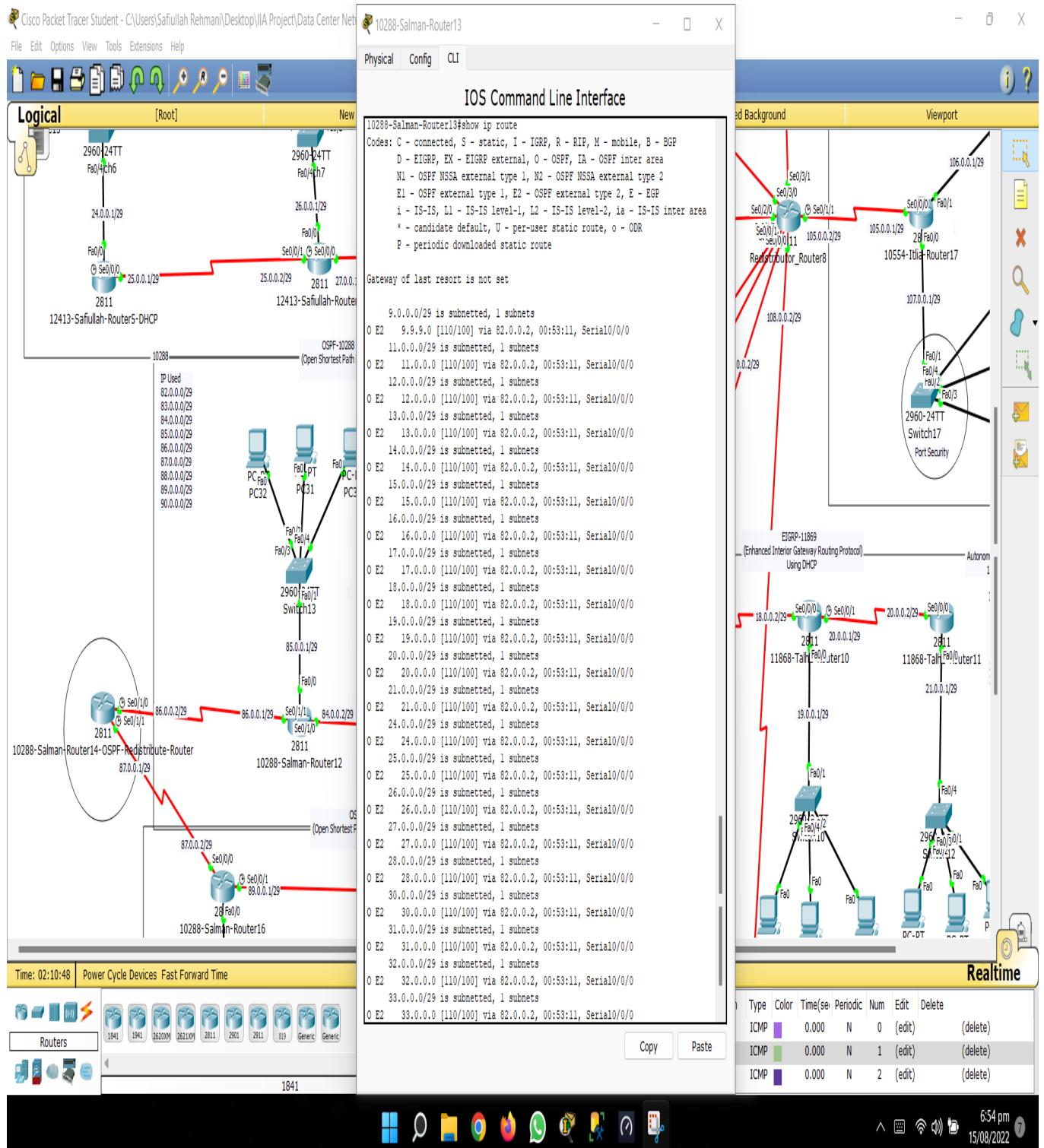


Continued...

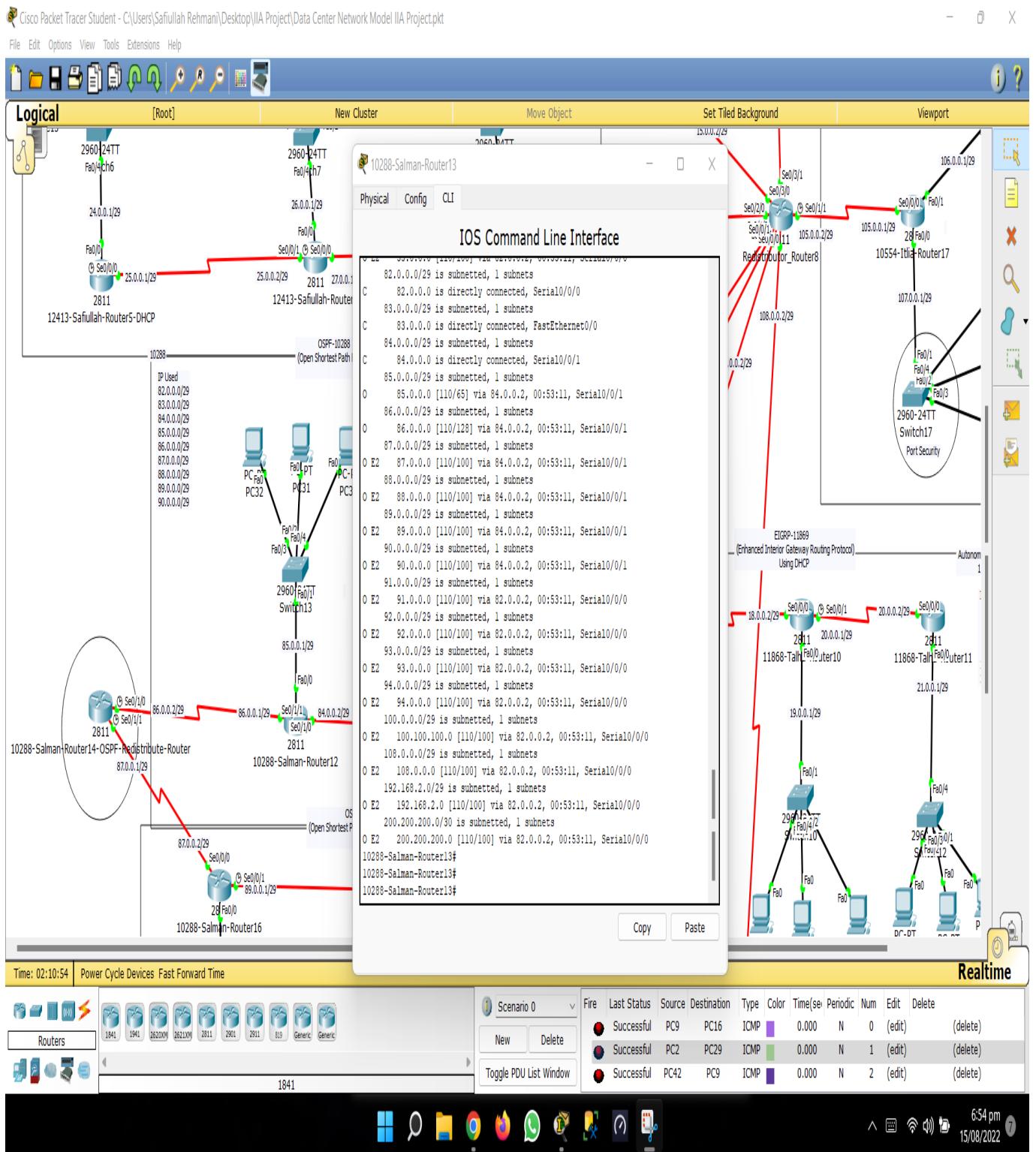


OSPF-10288 Router 13:-

Show IP Route:-

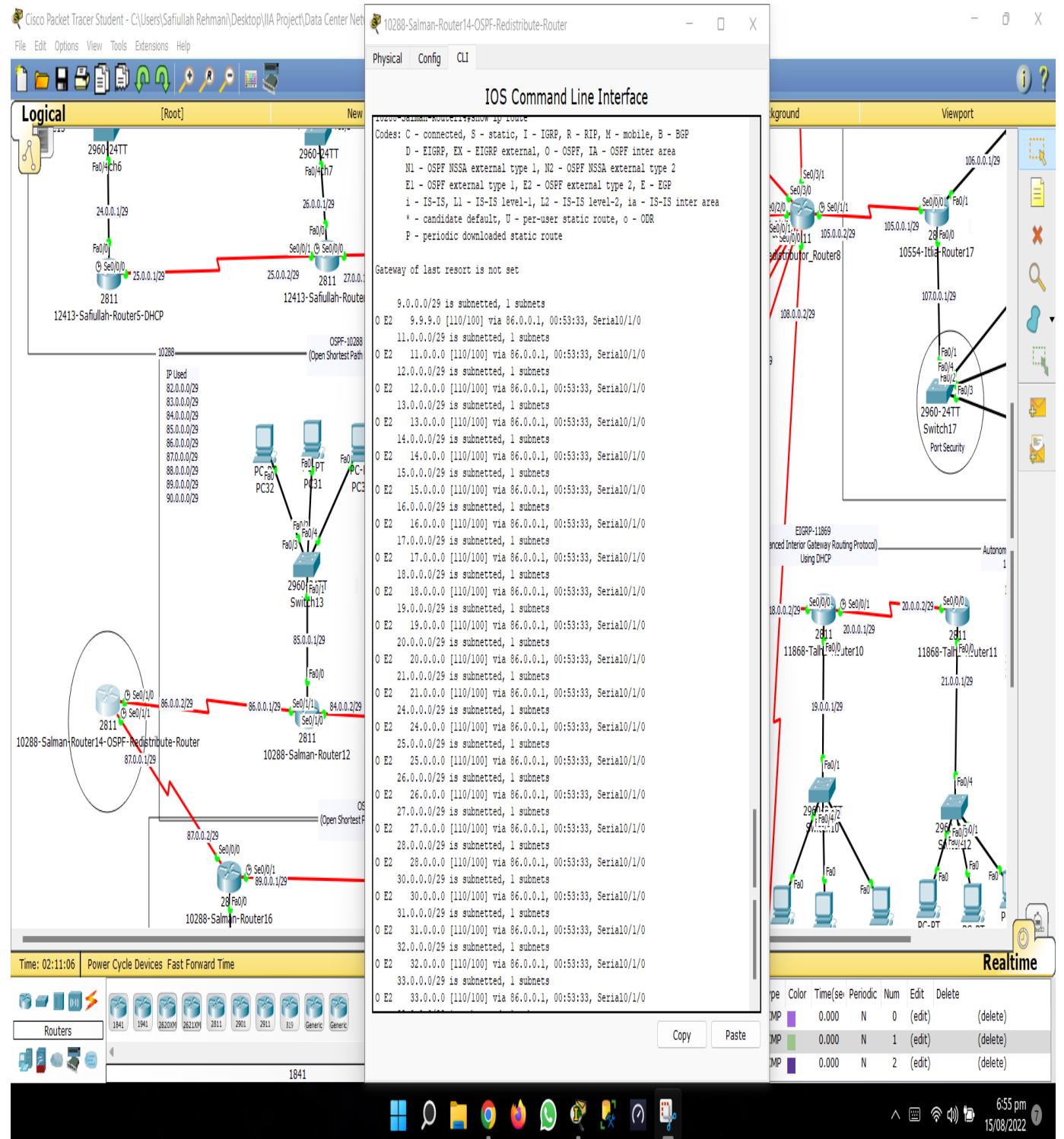


Continued....

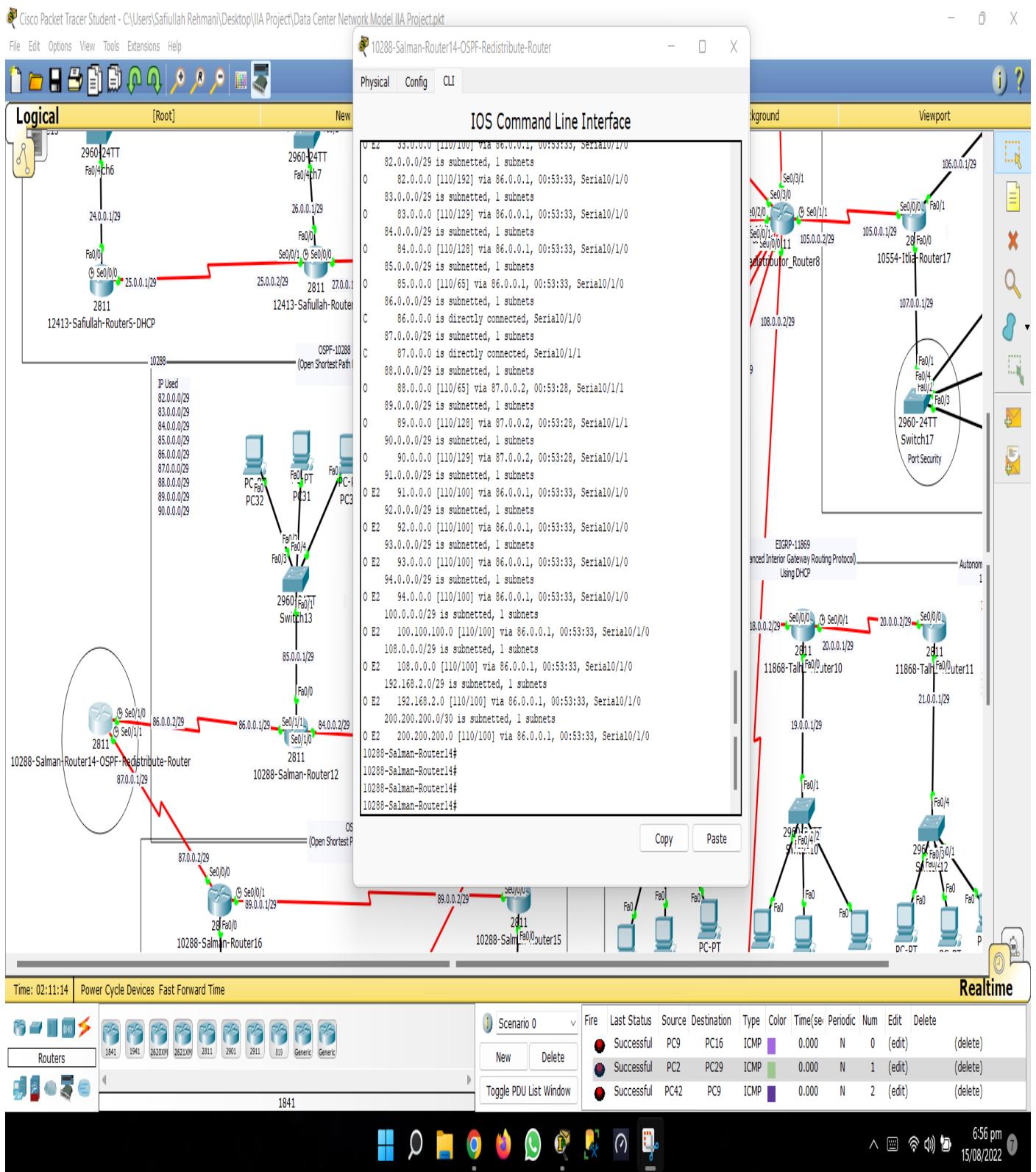


Redistributor Router For OSPF Router 14:-

Show IP Route:-

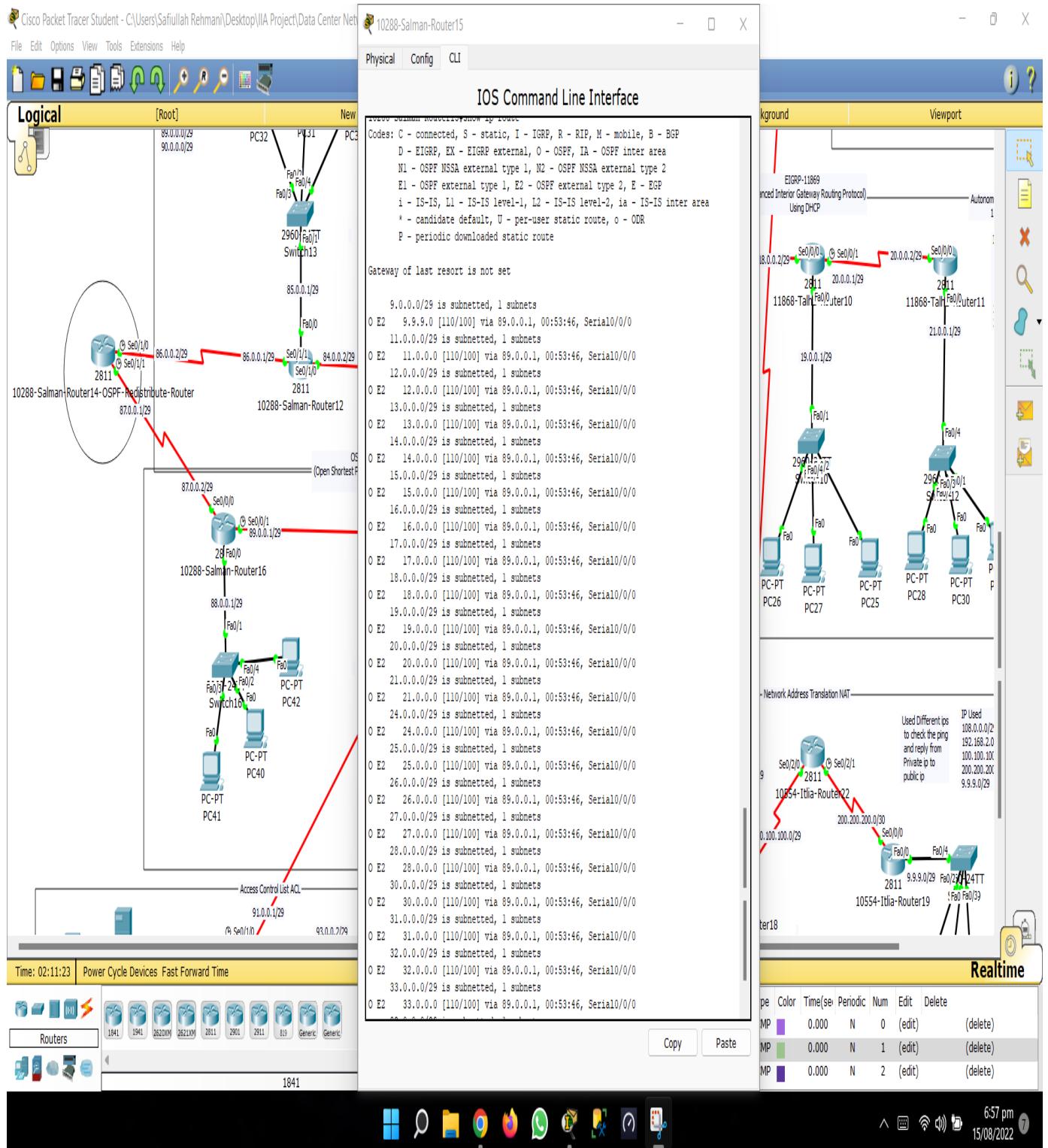


Continued....

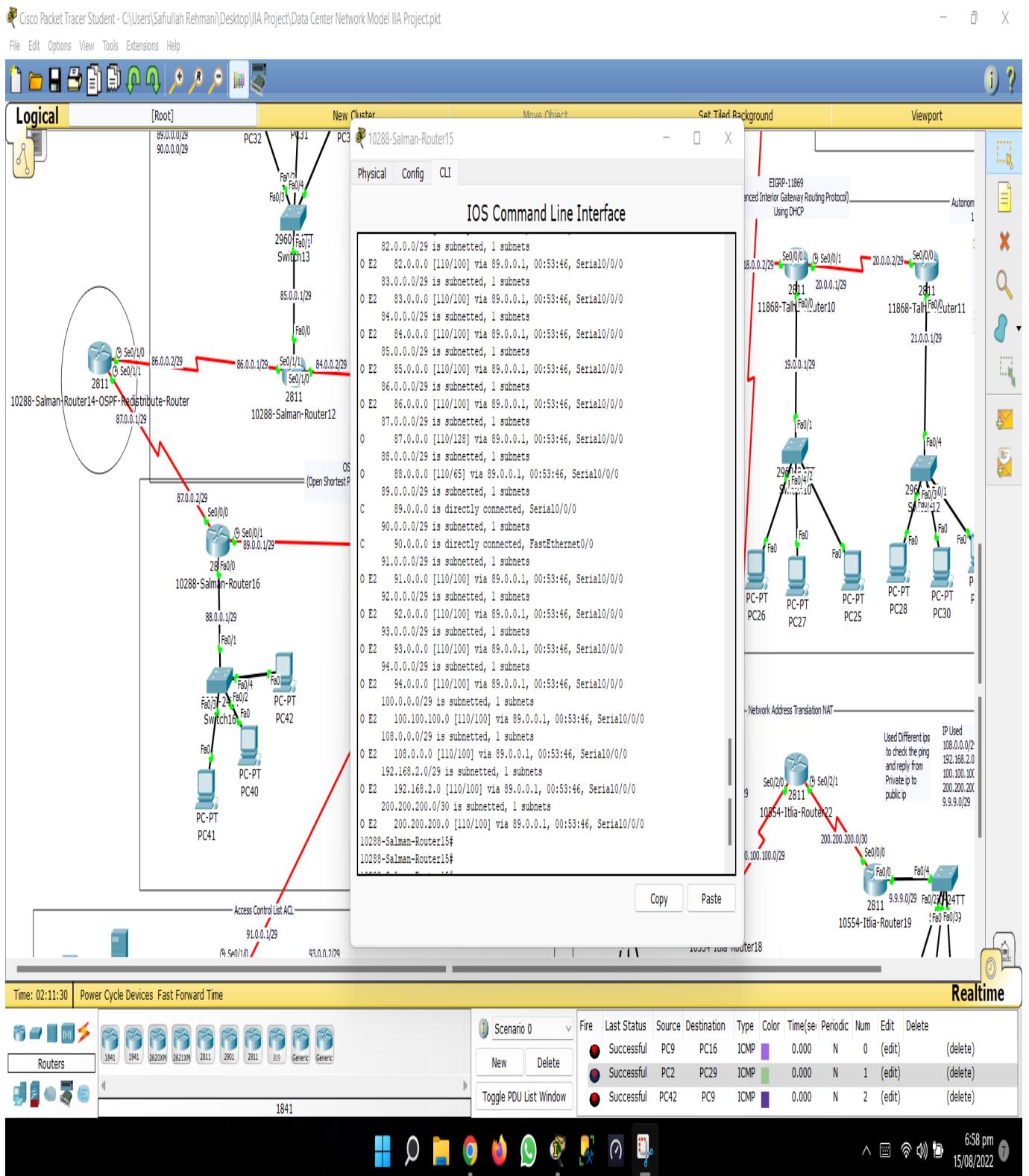


OSPF-10289 By DHCP Router 15:-

Show IP Route:-

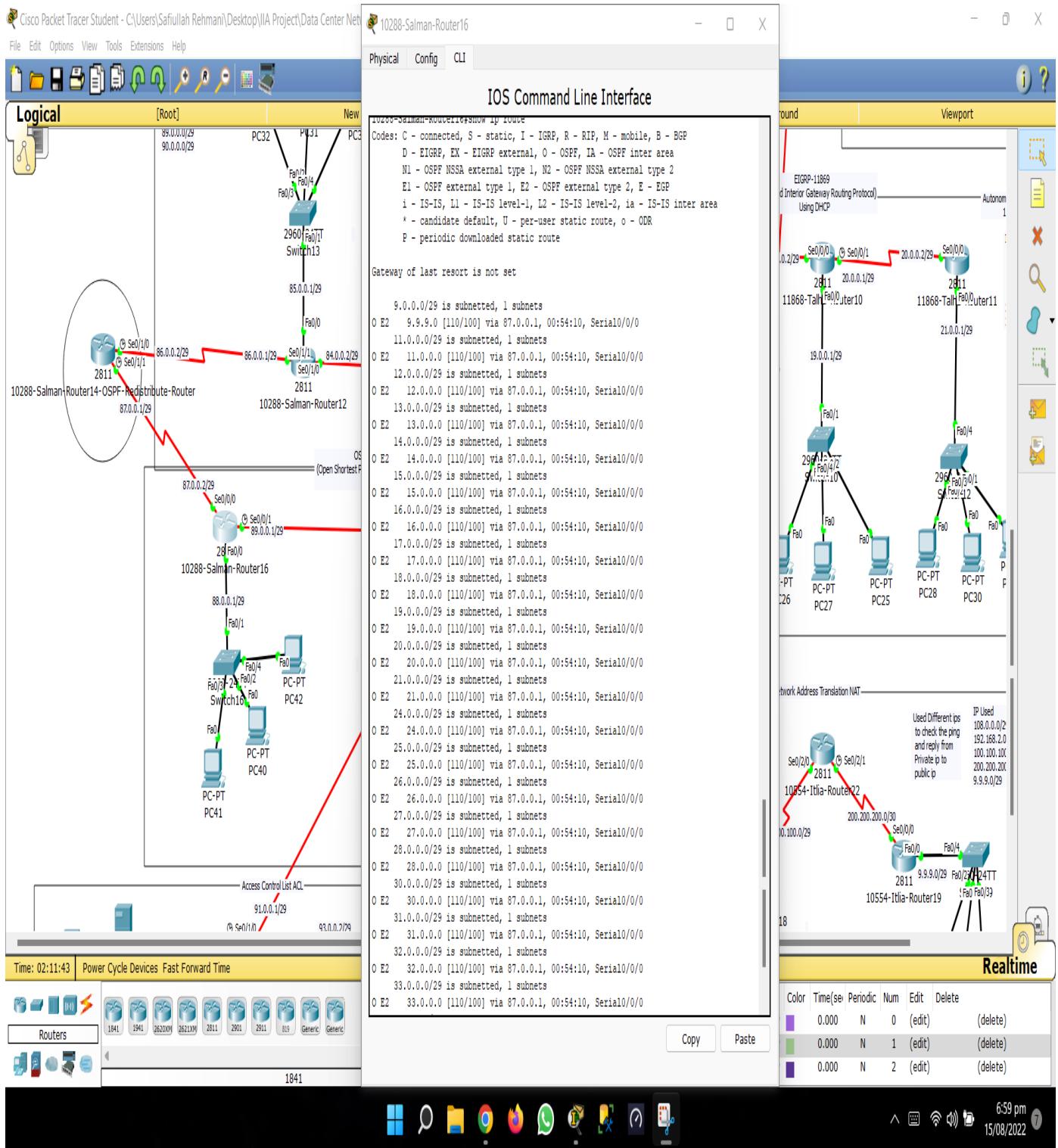


Continued....

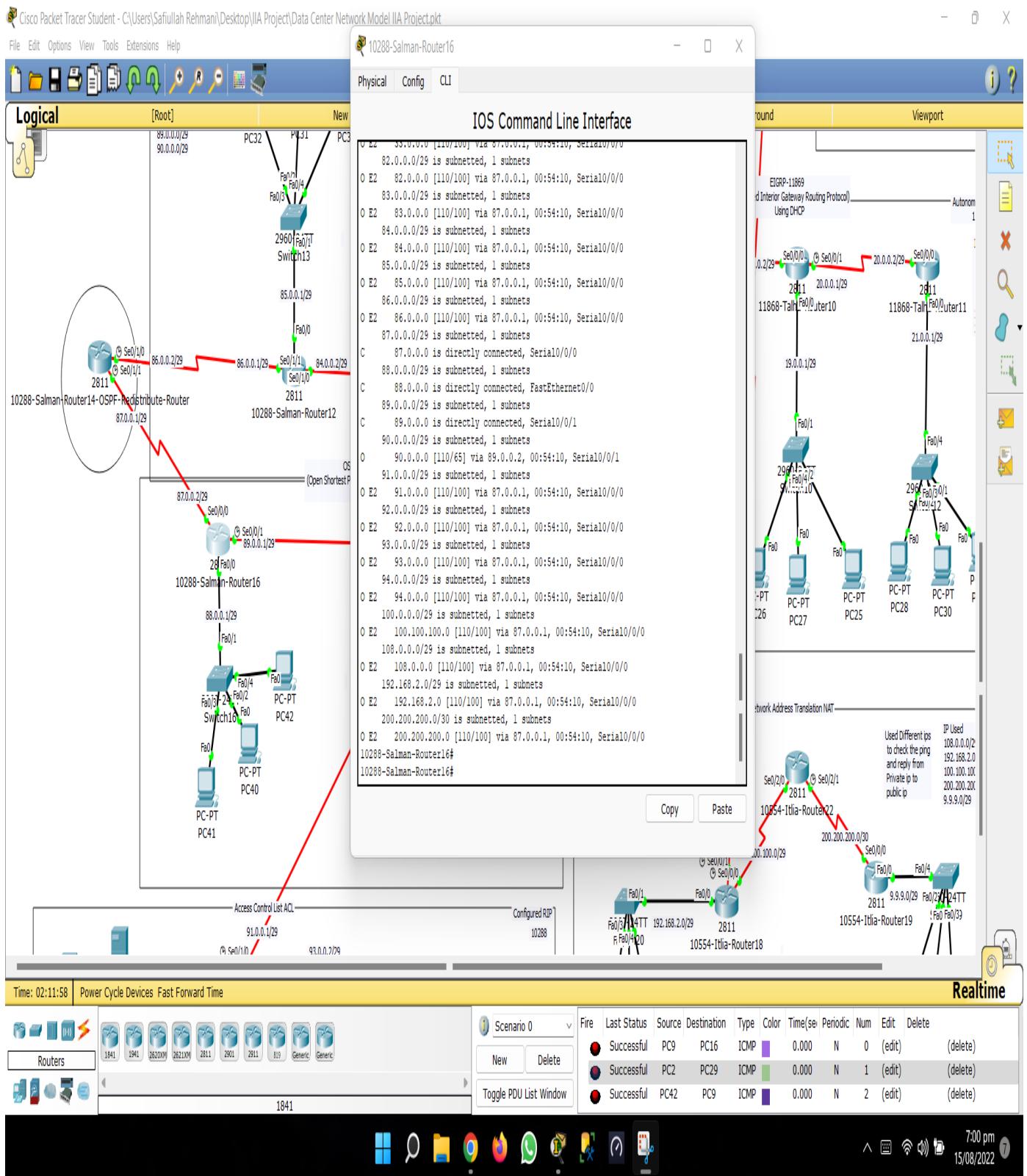


OSPF-10289 By DHCP Router 16:-

Show IP Route:-

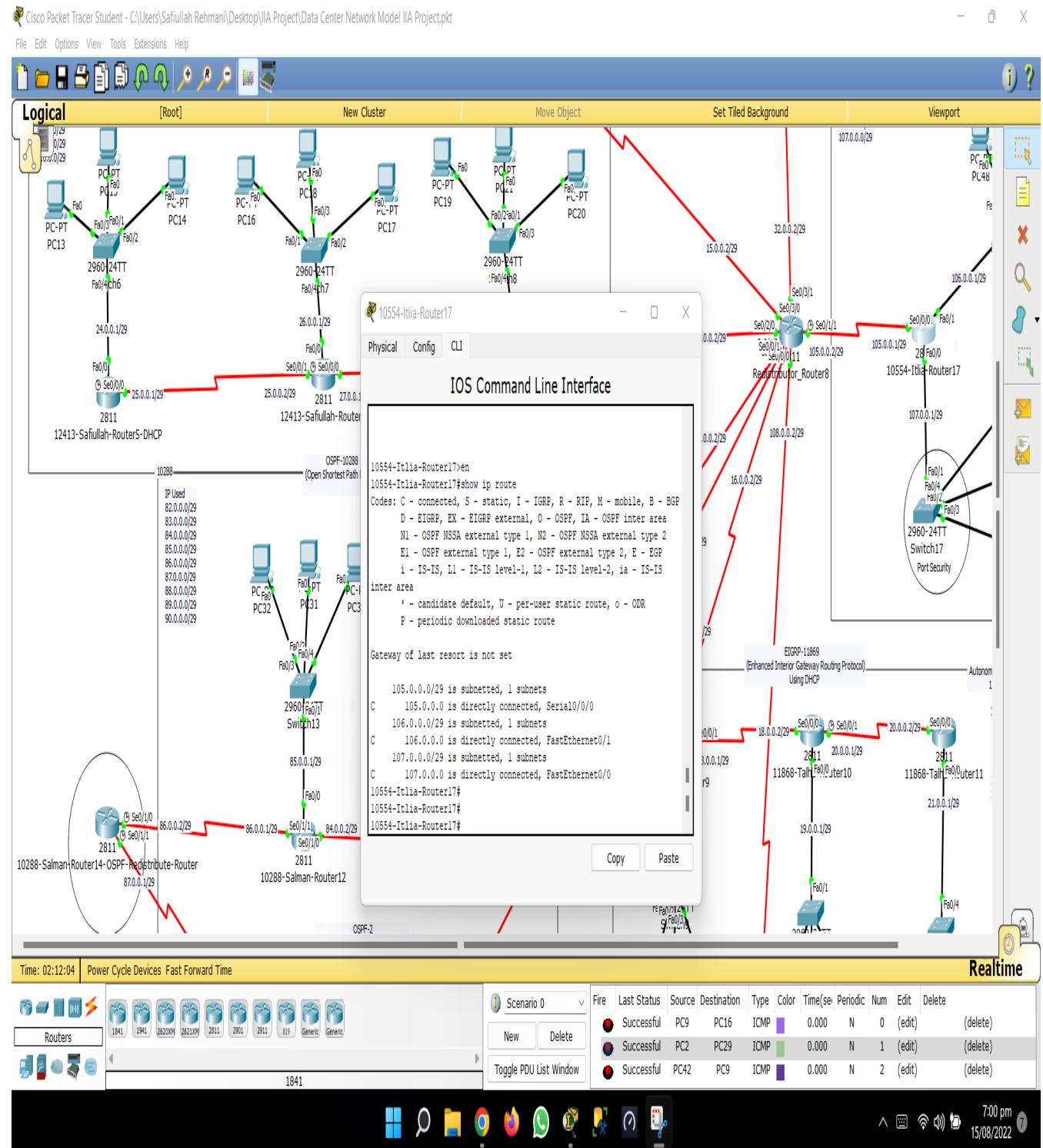


Continued....



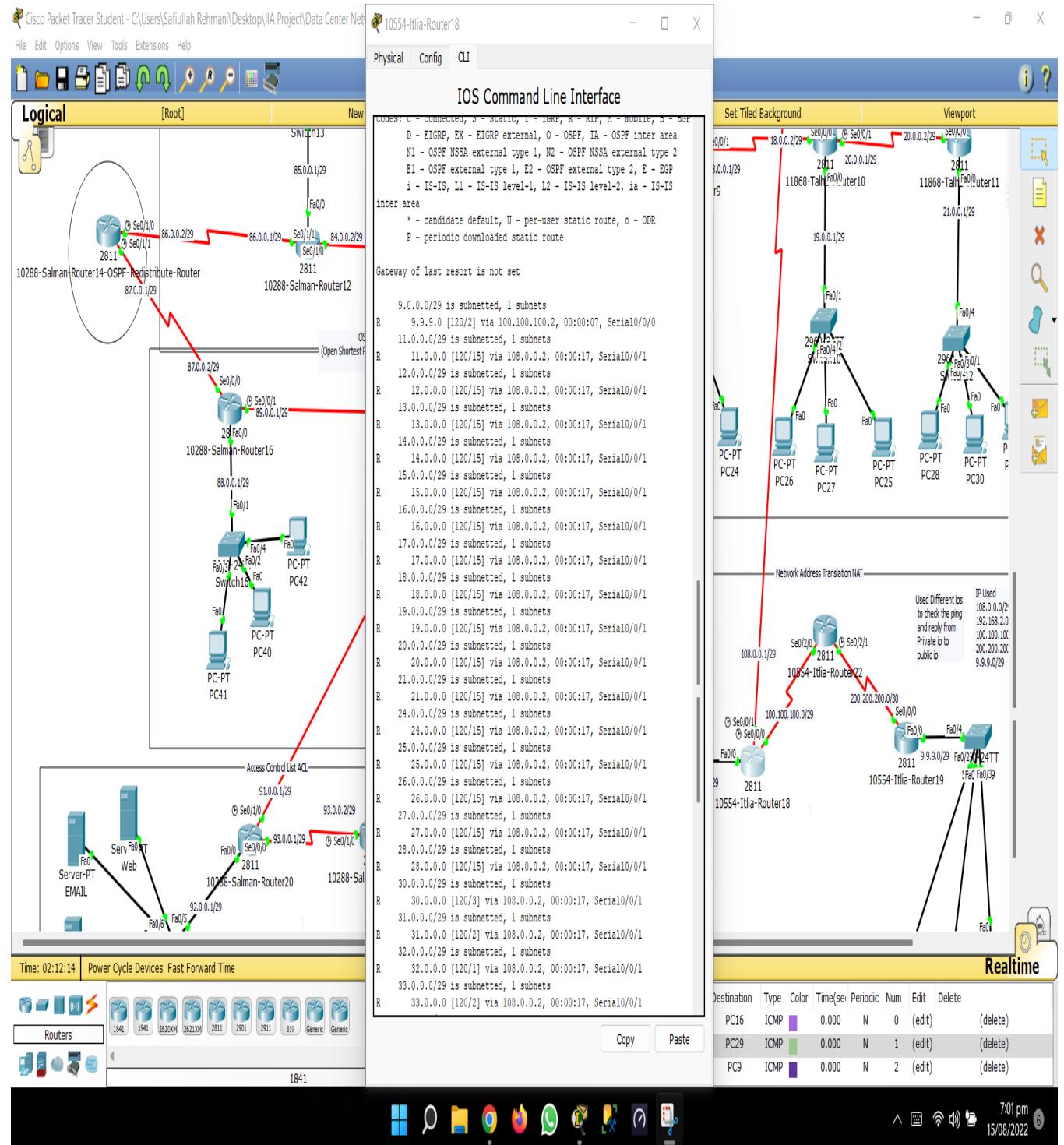
DHCP Router 17:-

Show IP Route:-

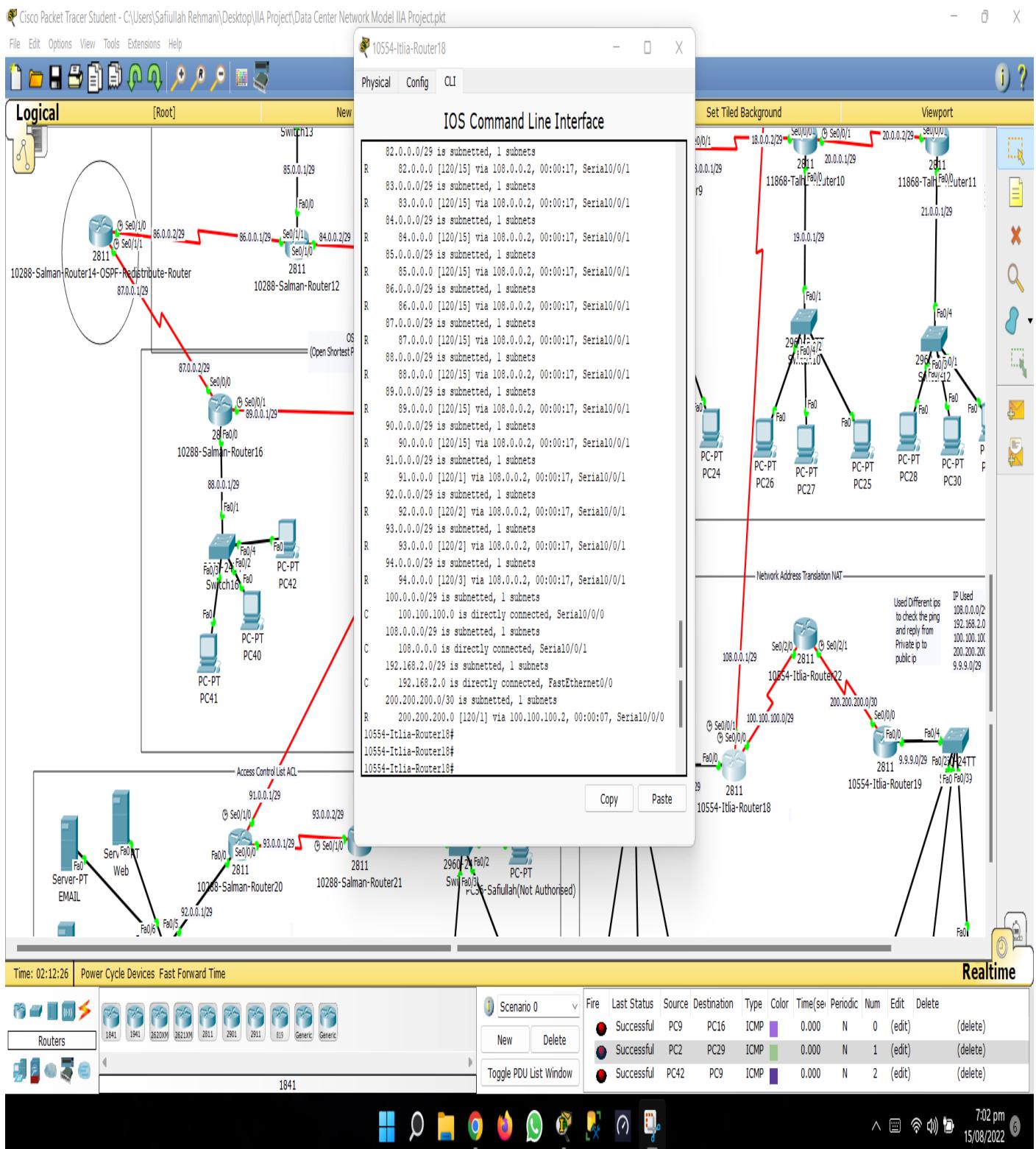


NAT Router 18:-

Show IP Route:-

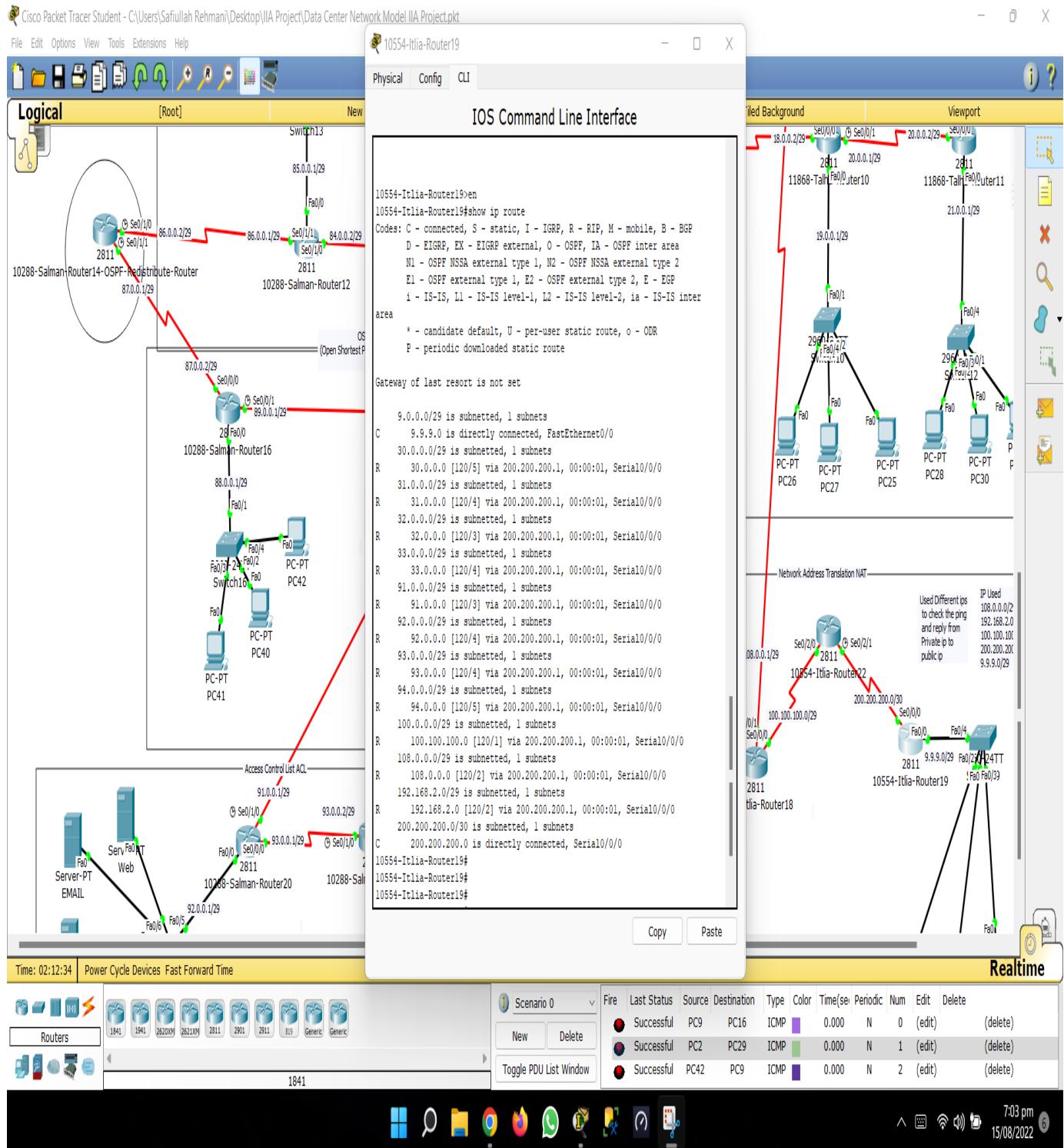


Continued....



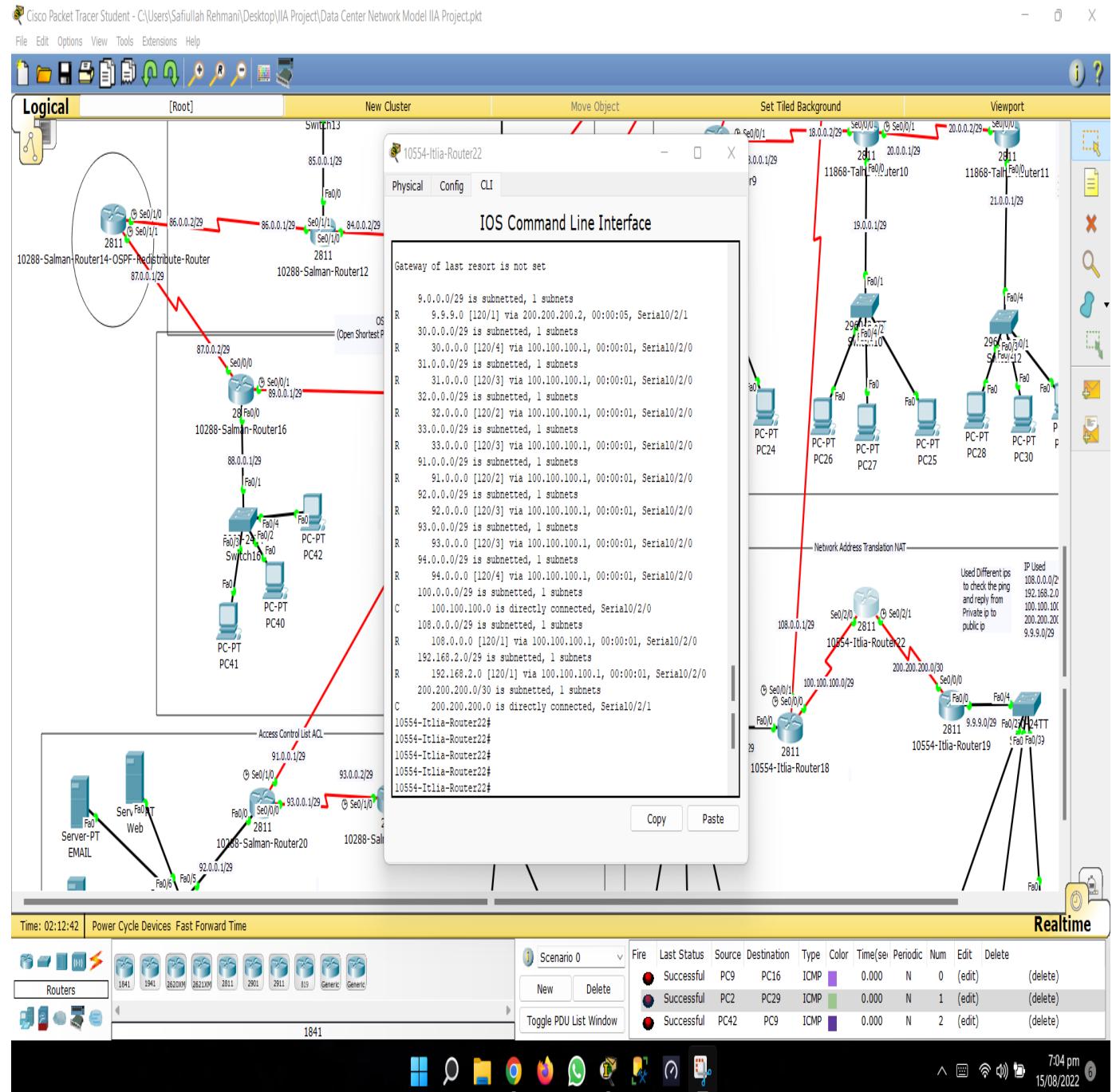
NAT Router 19:-

Show IP Route:-



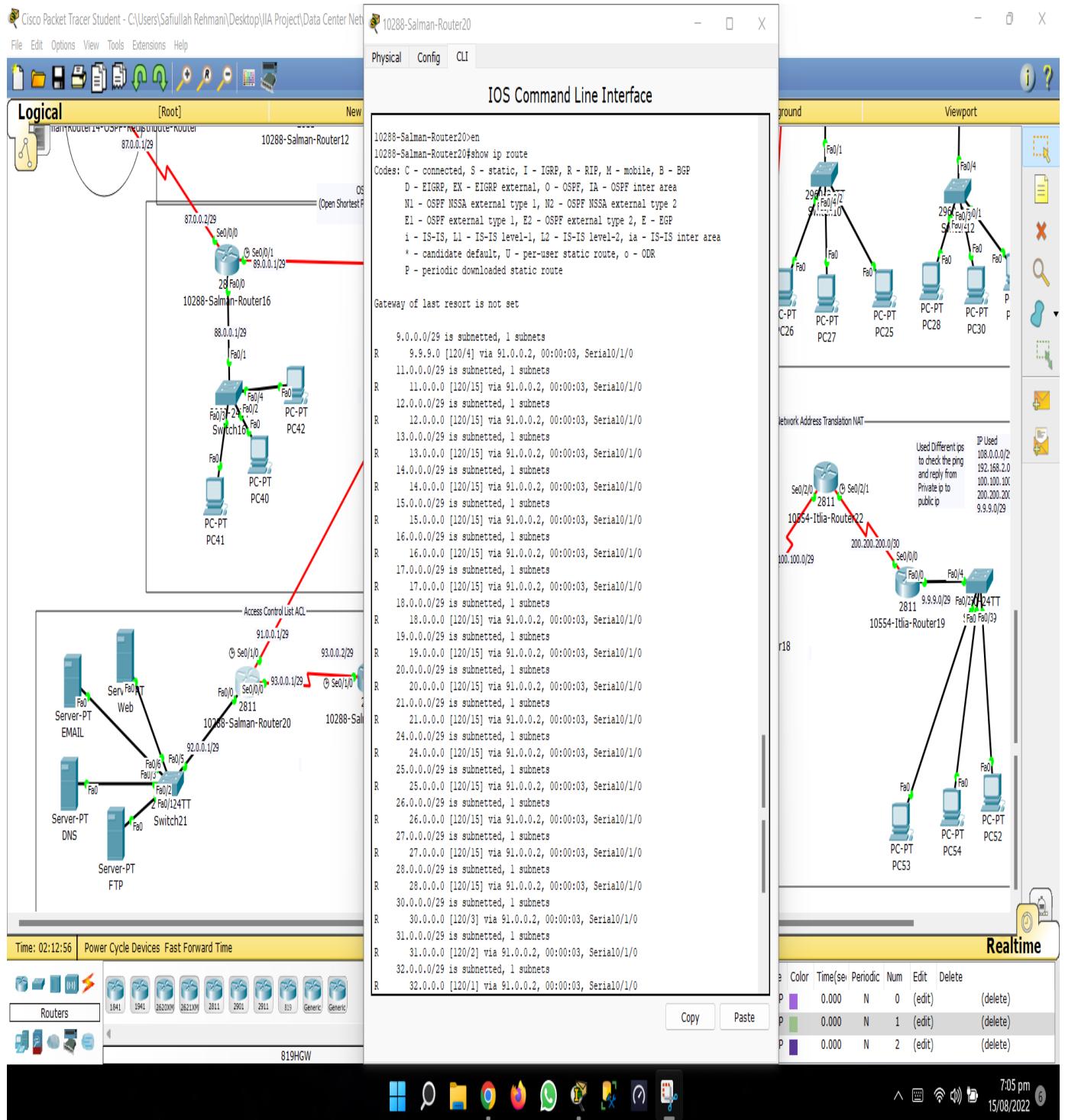
NAT Router 22:-

Show IP Route:-

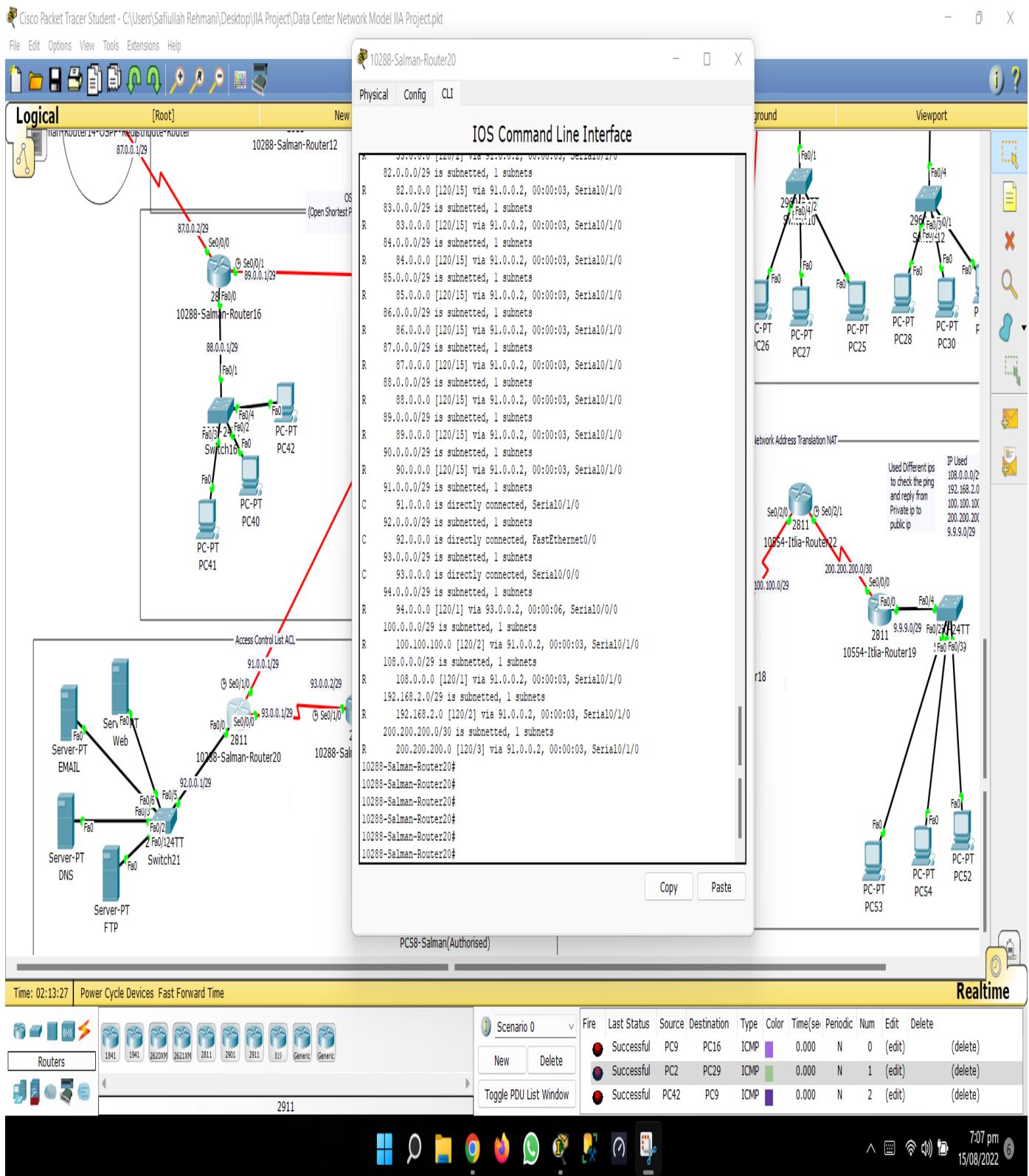


ACL Router 20:-

Show IP Route:-

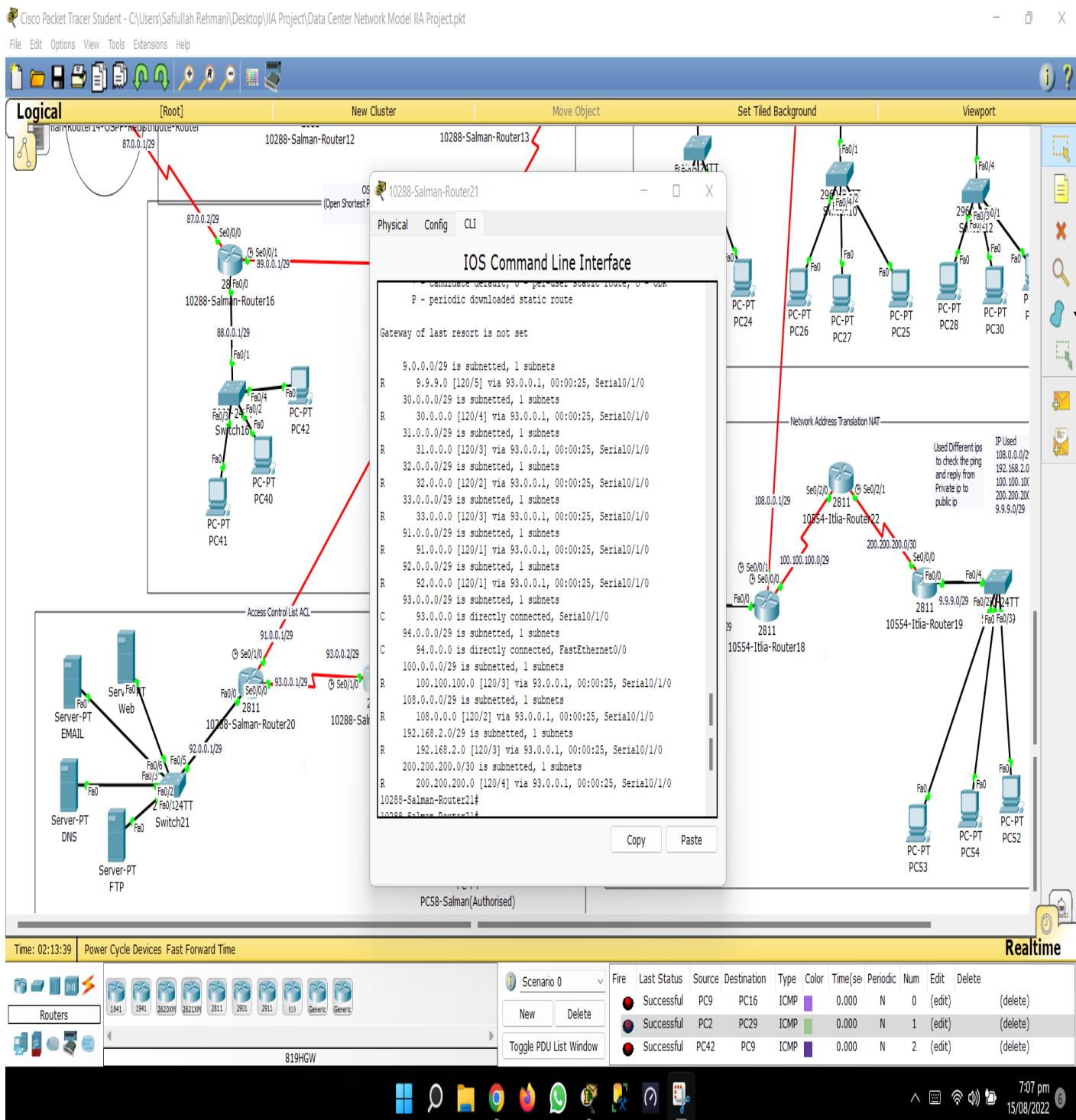


Continued...

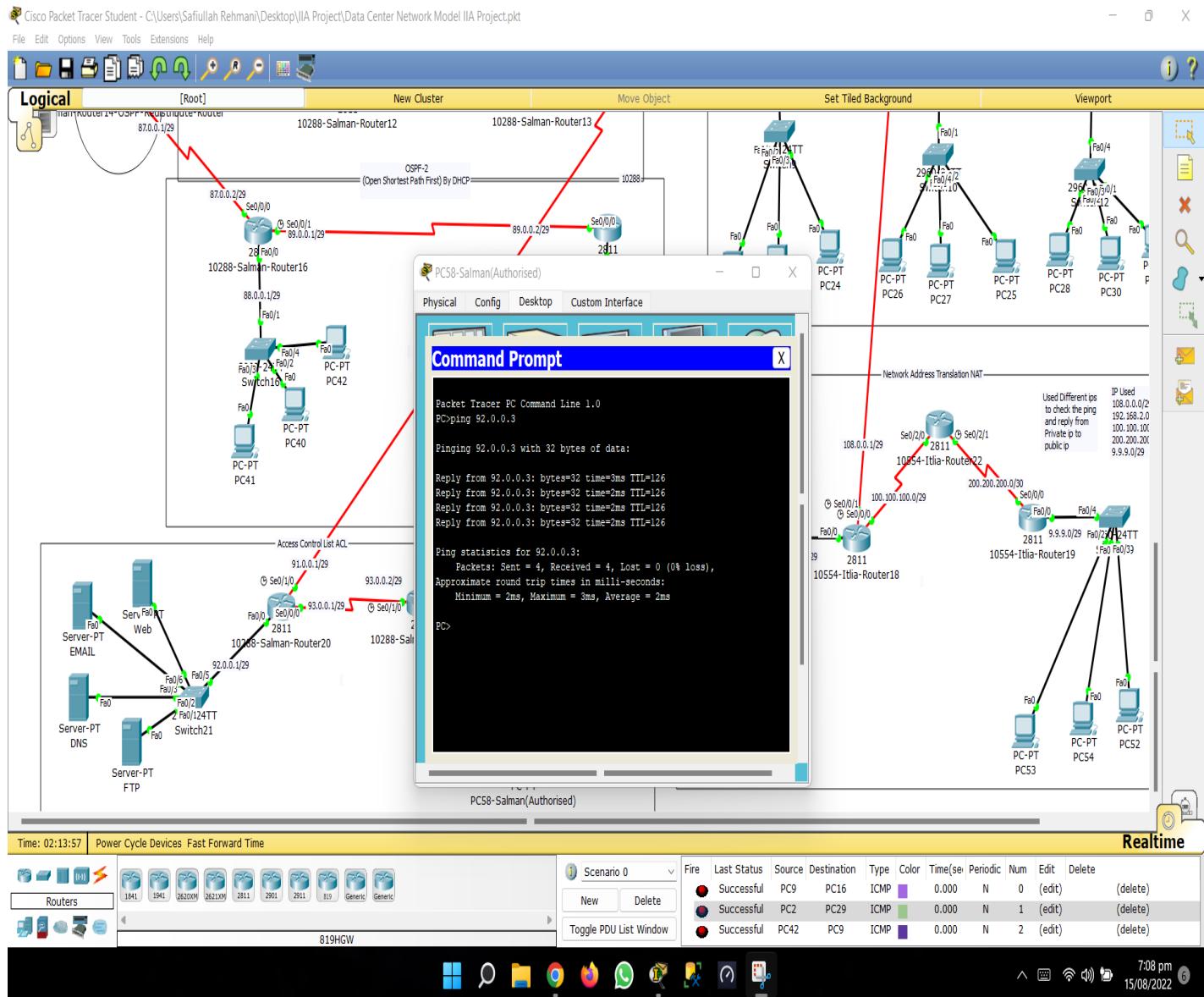


ACL Router 20:-

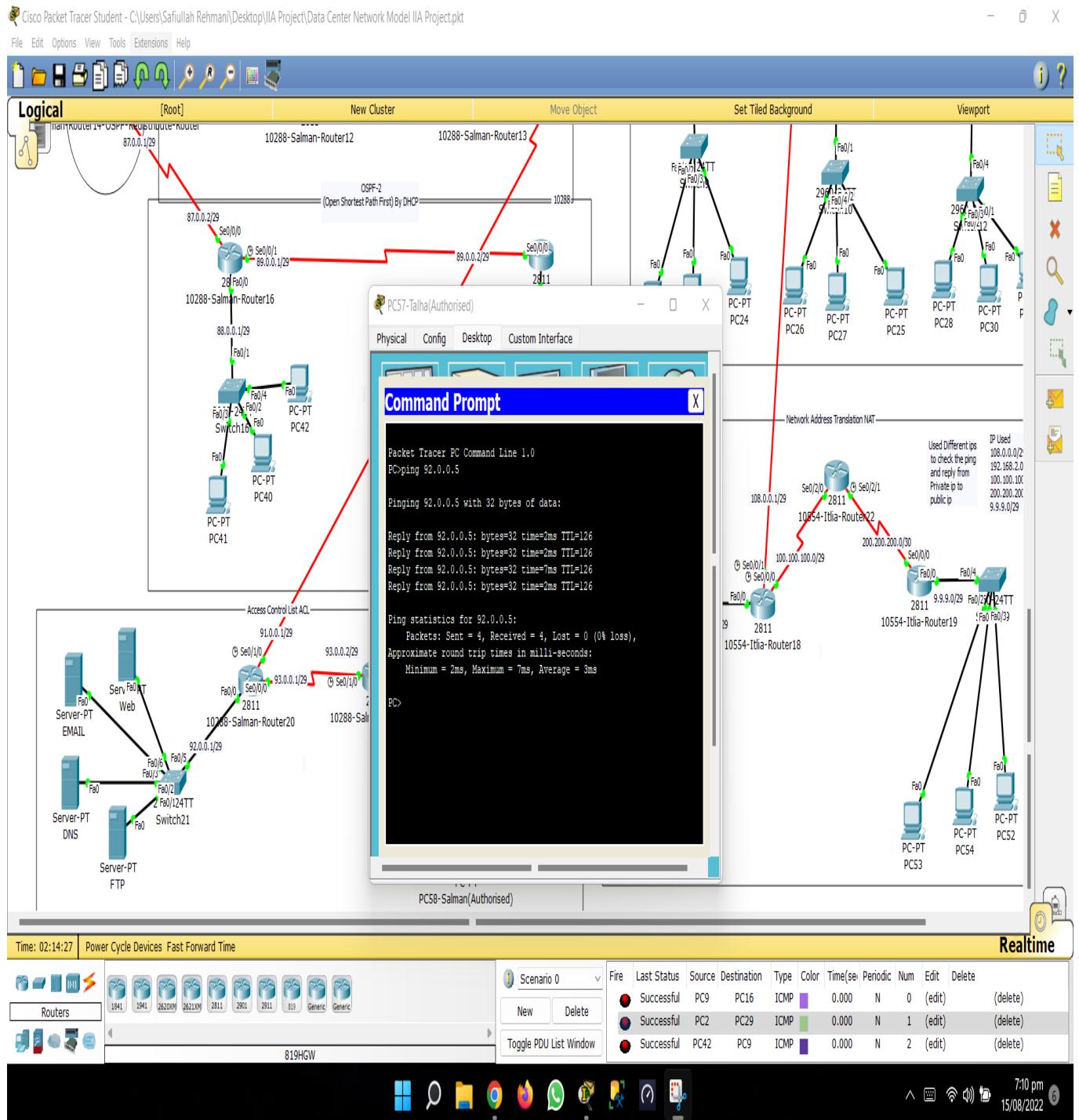
Show IP Route:-



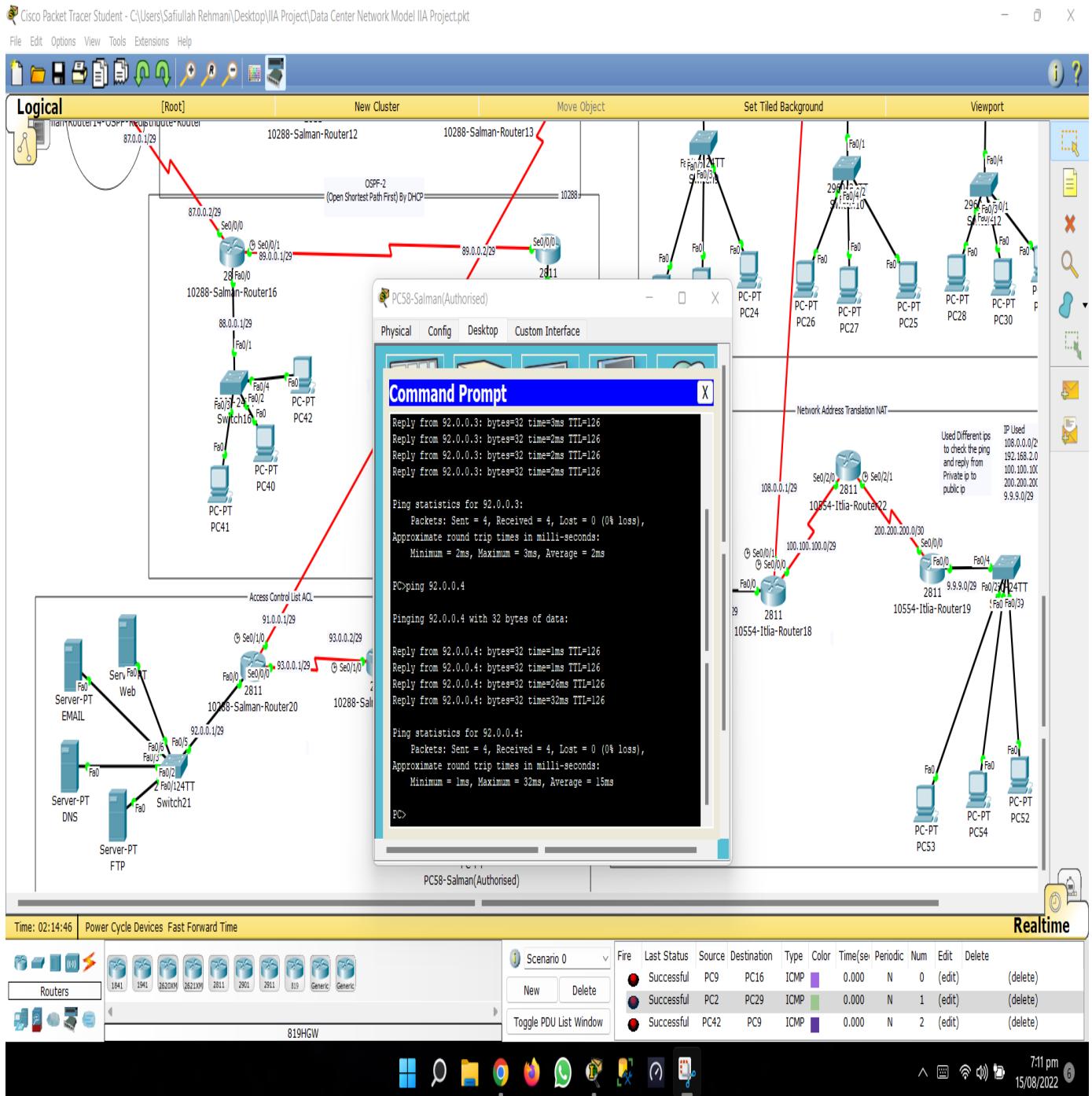
Ping Web Server ACL:-



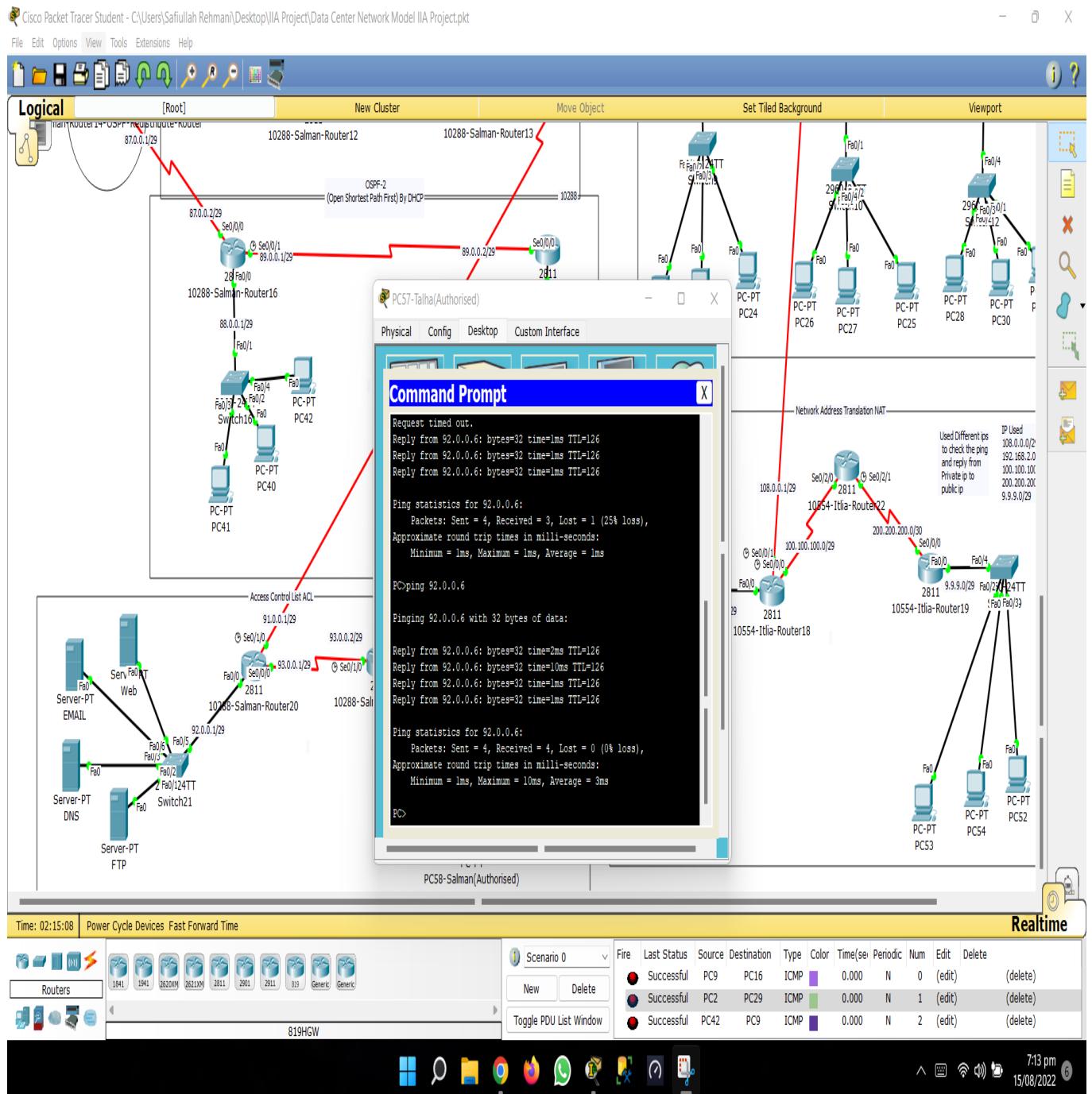
Ping DNS Server ACL:-



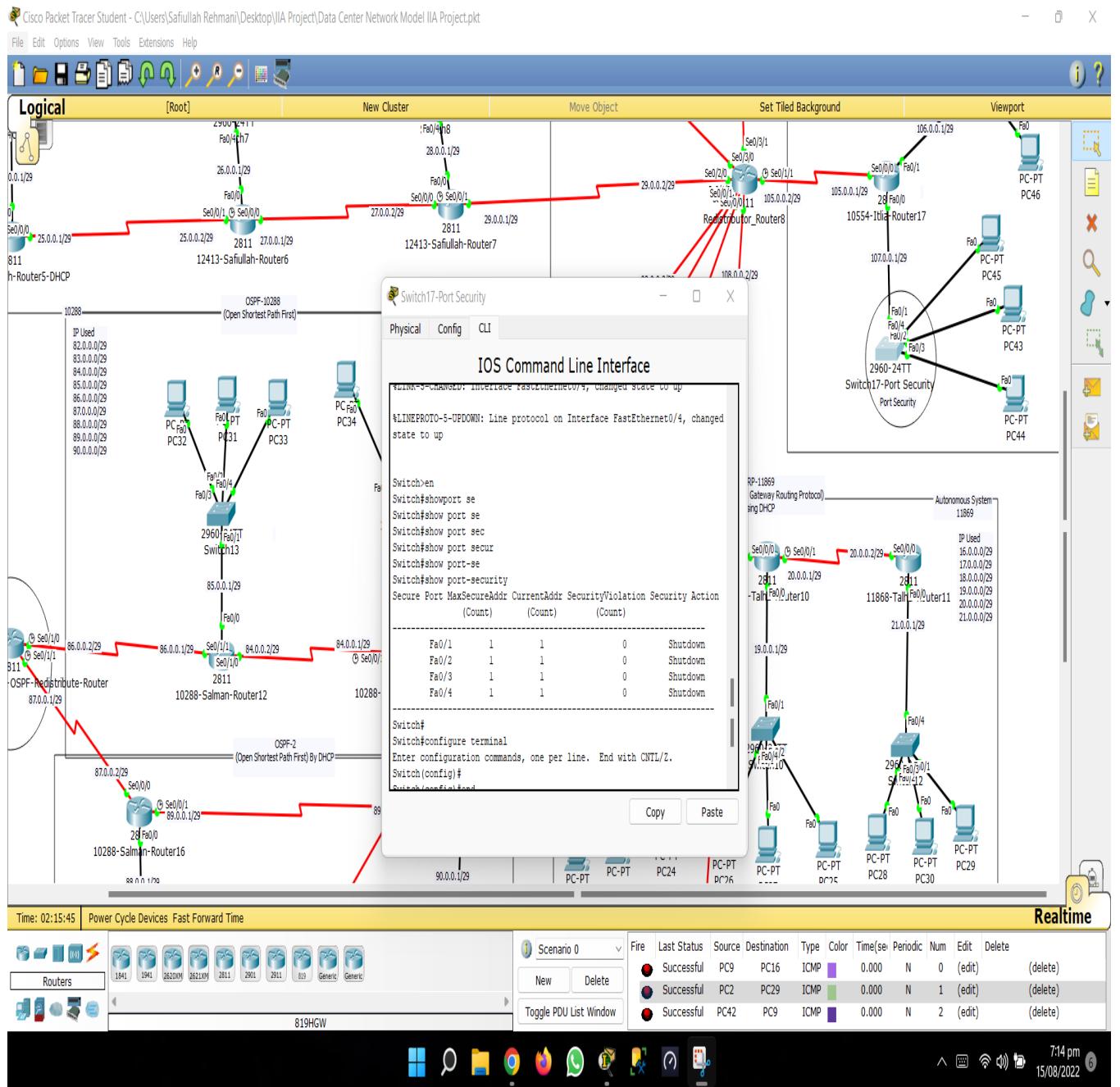
Ping EMAIL Server ACL:-



Ping FTP Server ACL:-

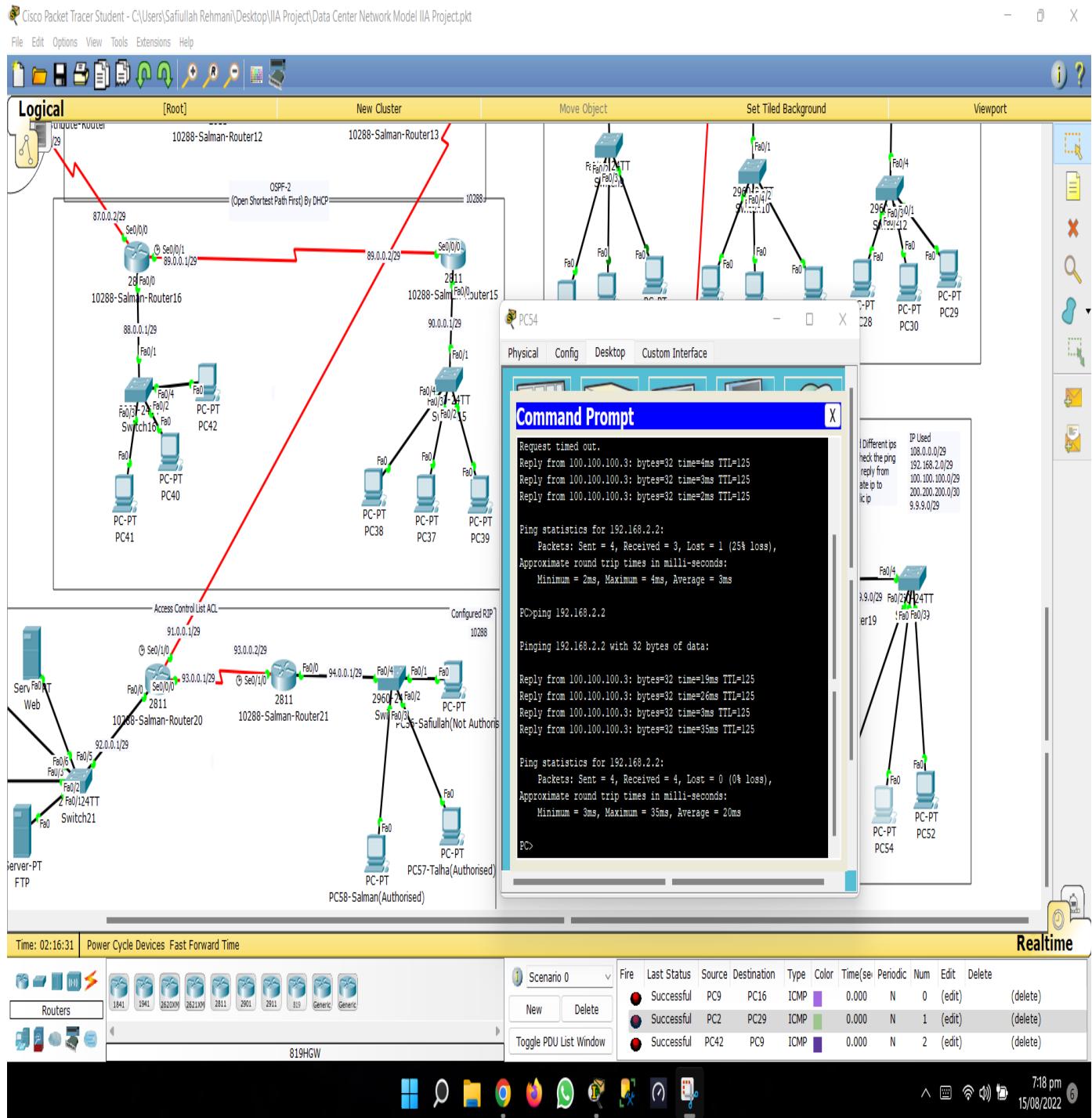


Show Port Security:-



NAT Ping Results:-

Calling 192.168.2.2



Calling 192.168.2.4:-

