Name: Muhammad Sherjeel Akhtar

Roll No: 20p-0101

Subject: Computer Network Lab

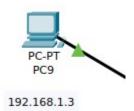
Task No: 5

Submitted To Respect Ma'am: Miss Hurmat Hidayat

Section: B

Task No 1: Answer: PC's:

-

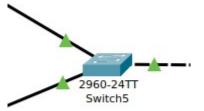


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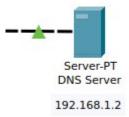
Switch:

•

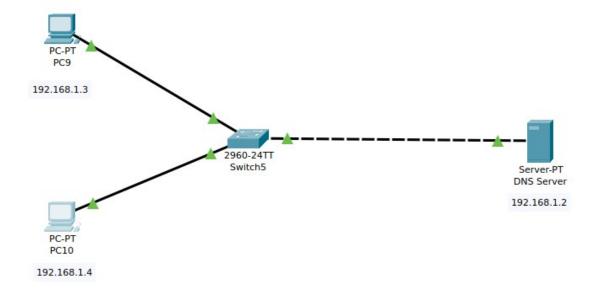


Server:

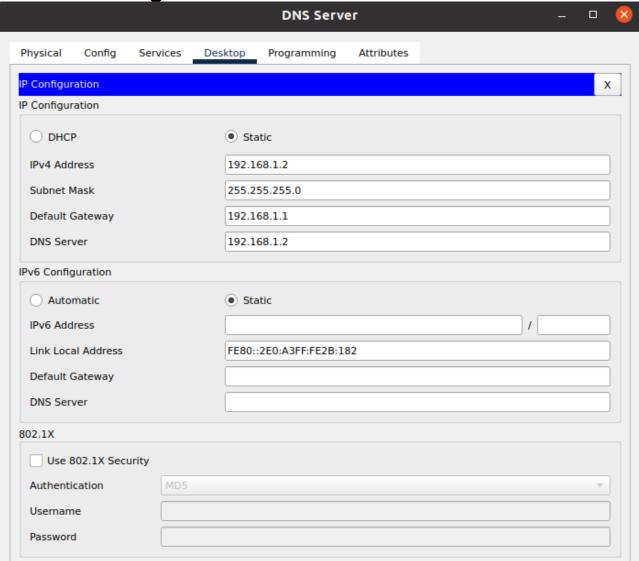
_



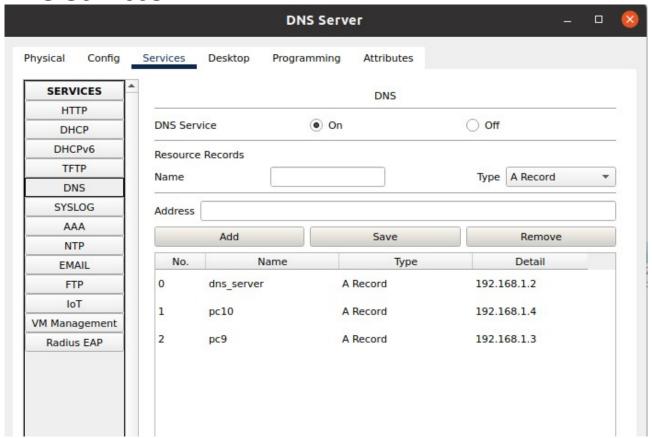
Whole Topology:



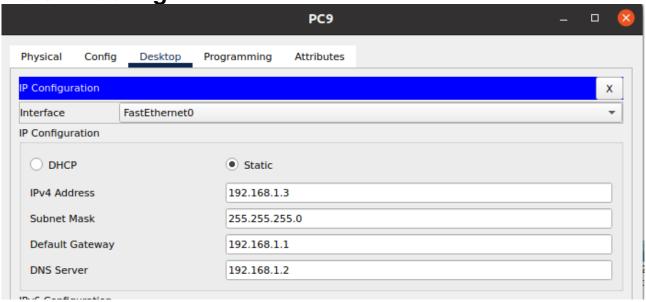
DNS IP Config:



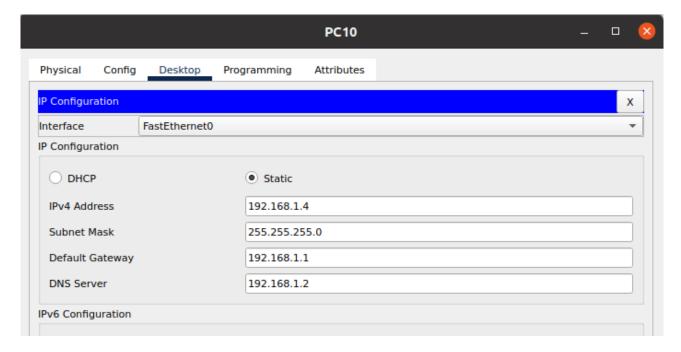
DNS Services:



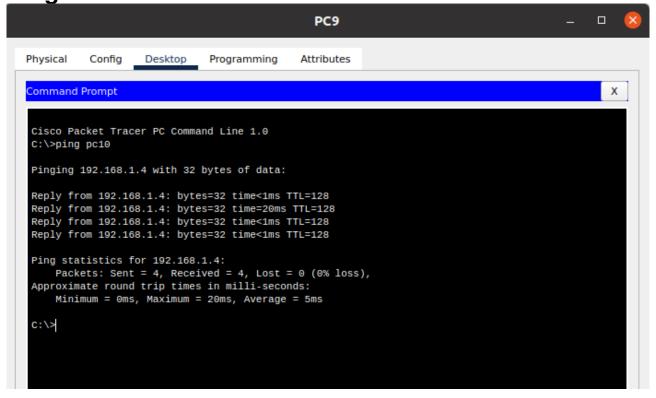
PC 9 IP Config:



PC 10 IP Config:



Ping Test:

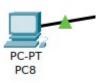


Task No 2: Answer:

PCs:

PC 8:





PC 7:

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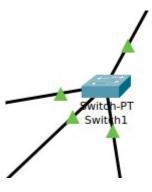
PC 6:

.



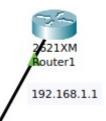
Switch:

.

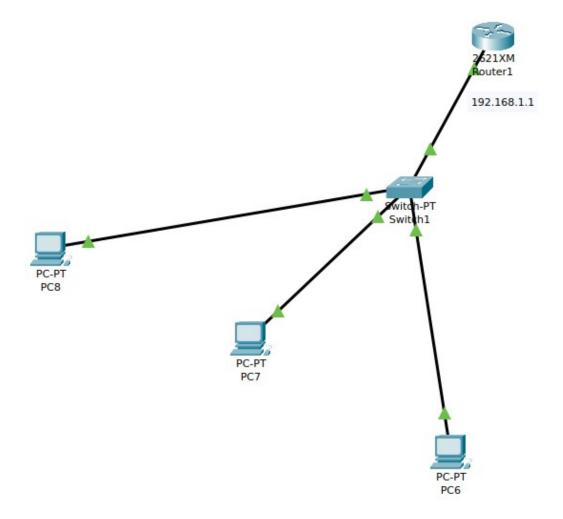


Router:

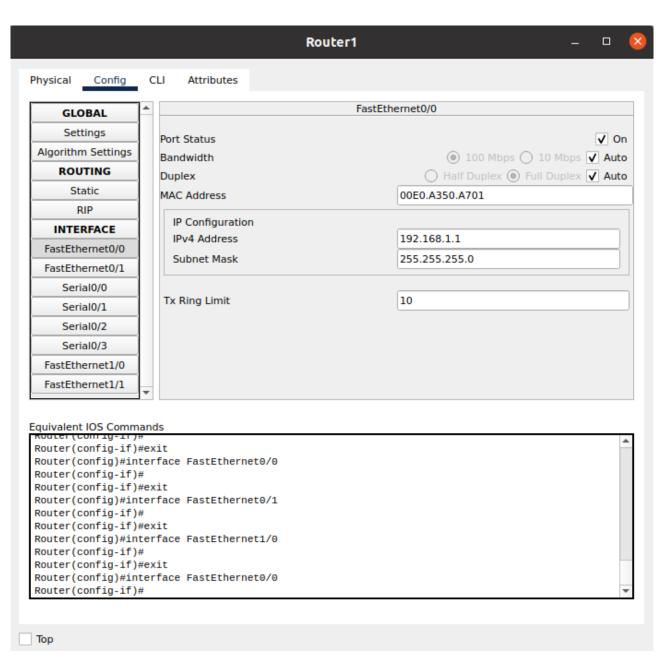
.



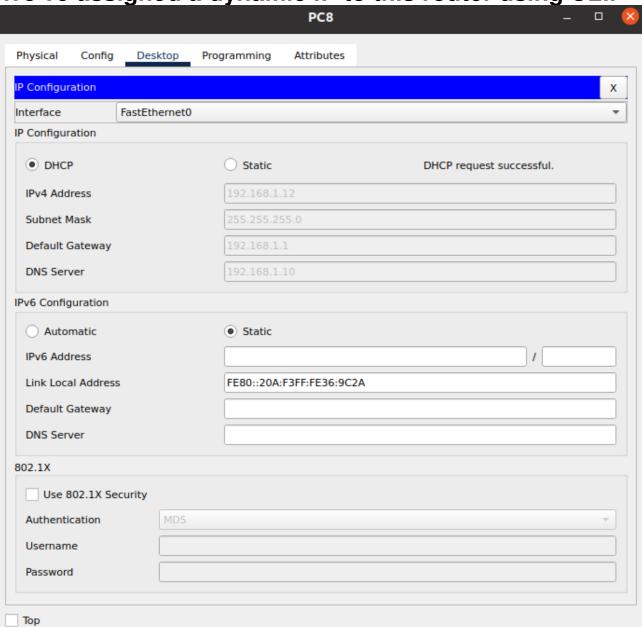
Whole Topology:

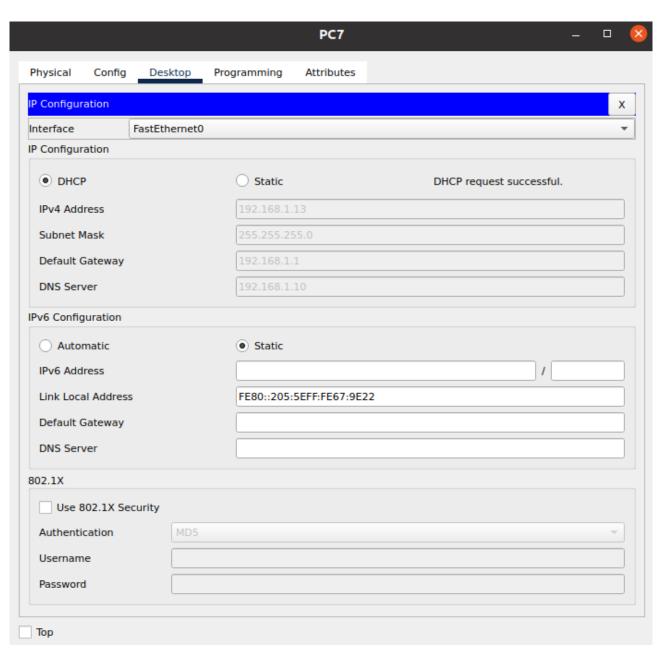


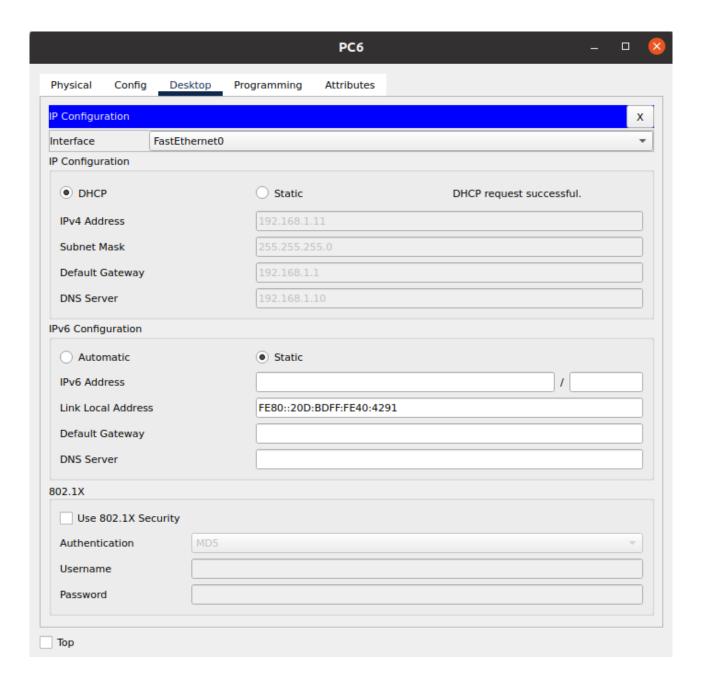
Router Configuration



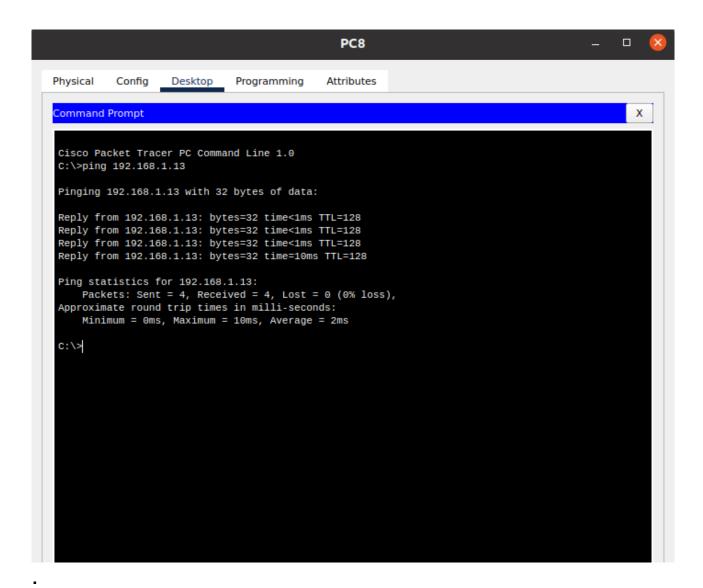
We've assigned a dynamic IP to this router using CLI.







Simply click the DHCP on every PC to assign the IP to every PC.
Ping Test:
Pinging PC7 from PC8

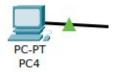


Task 3: Answer: PC's:

PC3:



PC4:



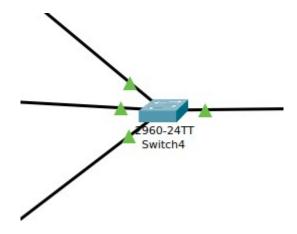
PC5:

•



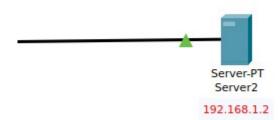
Switch:

.

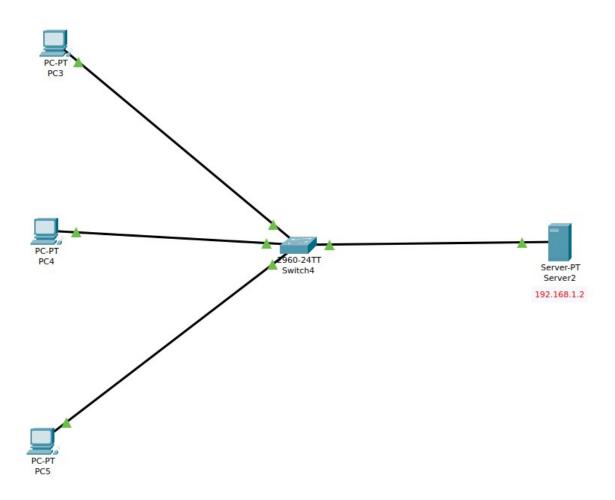


Server:

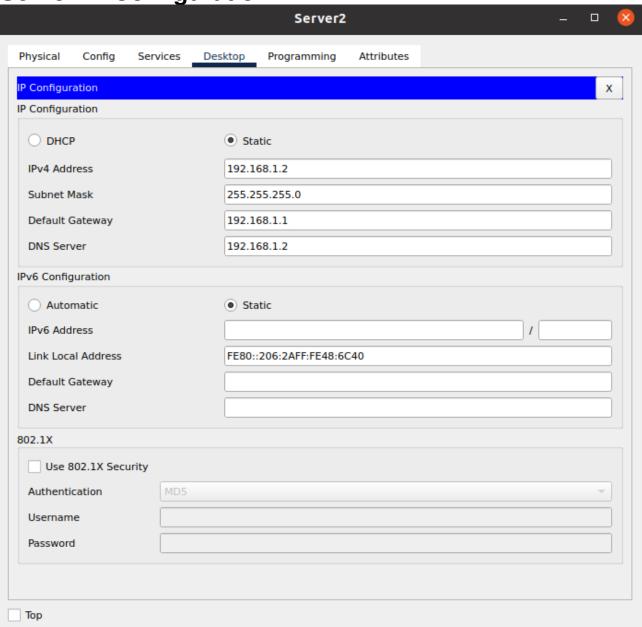
.



Whole Topology:



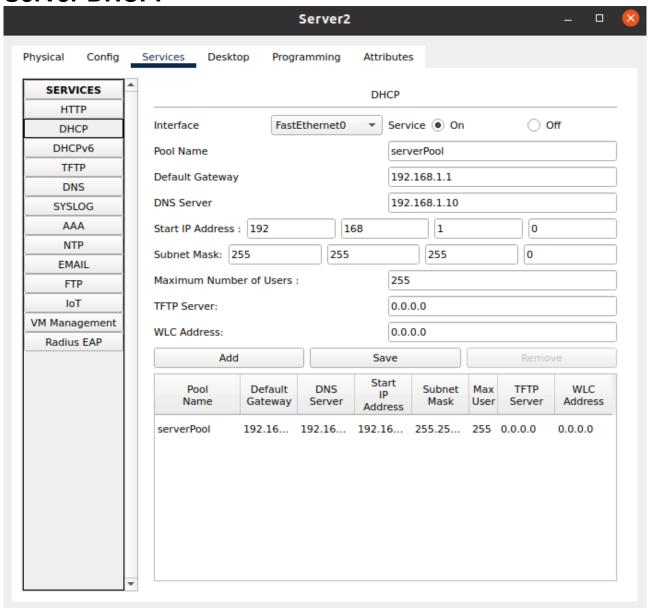
Server IP Configuration:



Server Config:

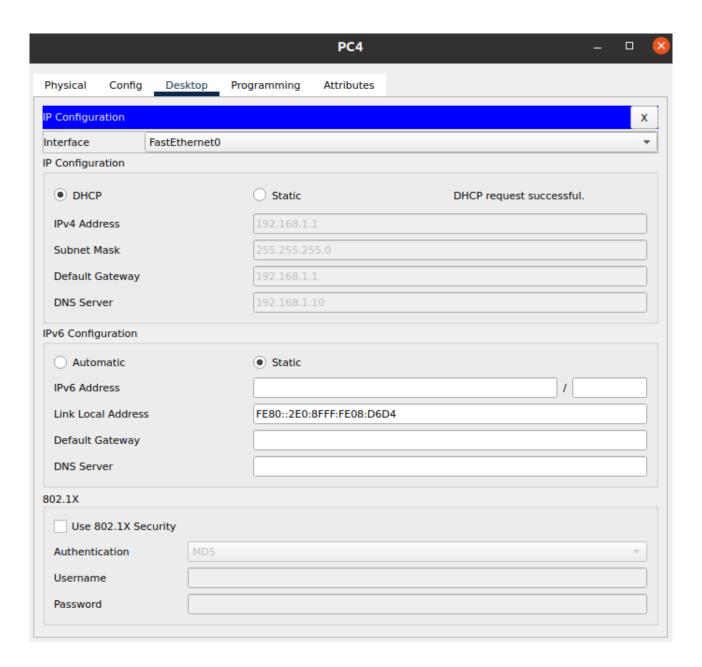
Settings Algorithm Settings	Port Status	
	Port Status	
	Bandwidth	 ✓ On ● 100 Mbps ○ 10 Mbps ✓ Auto
INTERFACE	Duplex	○ Half Duplex ● Full Duplex ▼ Auto
FastEthernet0	MAC Address	0006.2A48.6C40
		(4333211333313
	IP Configuration DHCP	
	Static	
	IPv4 Address	192.168.1.2
	Subnet Mask	255.255.255.0
	Subject Mask	233.233.233.0
	IPv6 Configuration	
	Automatic	
	Static	γ
	IPv6 Address	
	Link Local Address: FE80::206:2AFF	FFE48:6C40

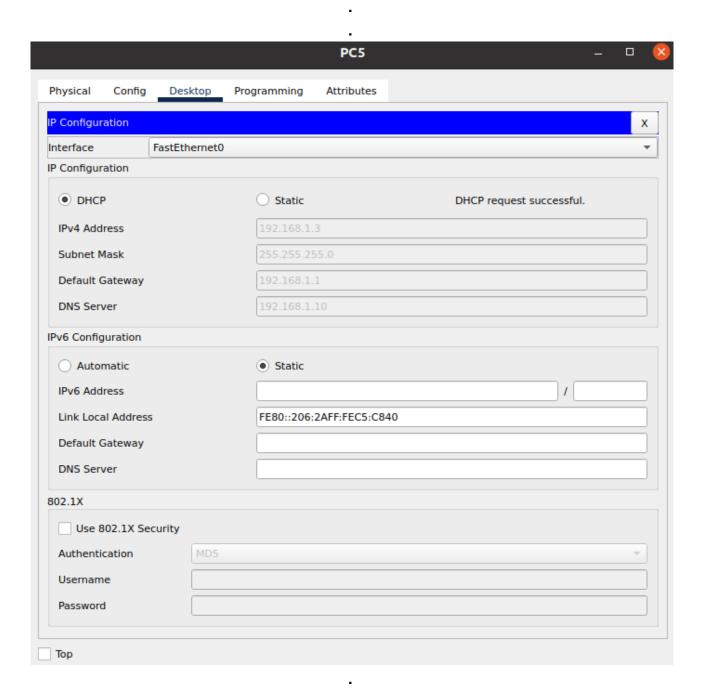
Server DHCP:

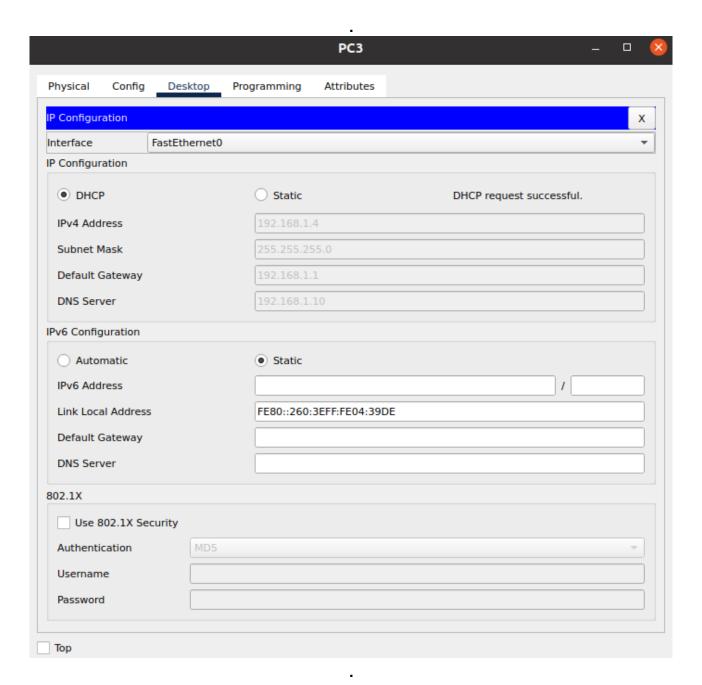


As we are not using any Router so we are not going to use Helper Address in this topology.

Setting DHCP On PC's:







Task 4: Answer: PC's:	
.PC15:	
	PC-PT PC15
.PC16:	
	PC-PT PC16
.PC17:	1
	PC-PT PC17
Switch:	1
	2960 24TT Switth0
.Router:	/ 1
•	ISR4331 Router3

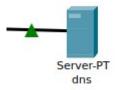
.Servers:

•

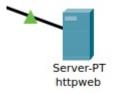


•

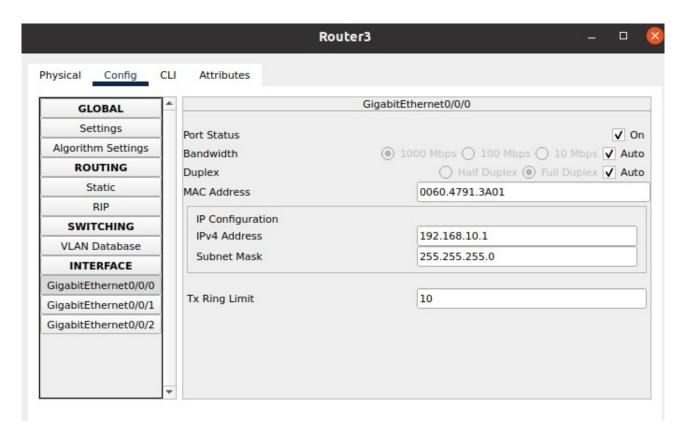
.

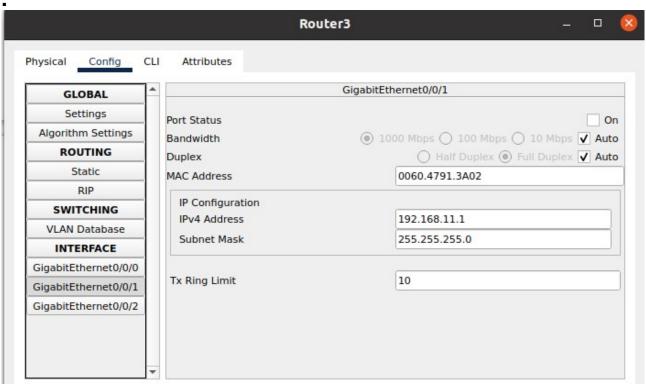


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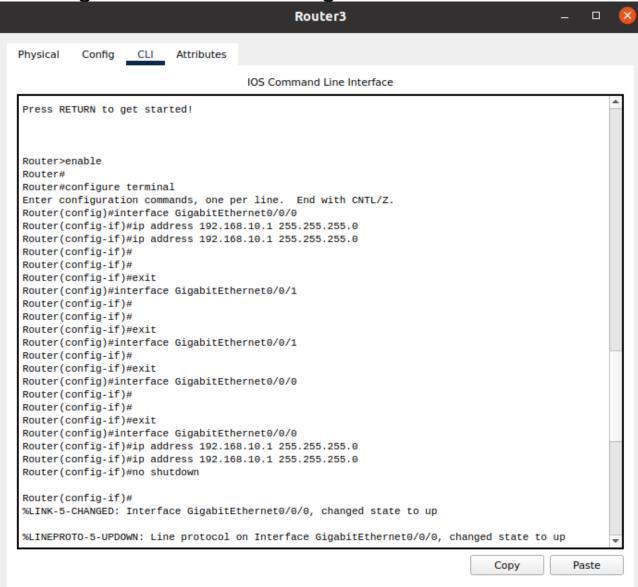


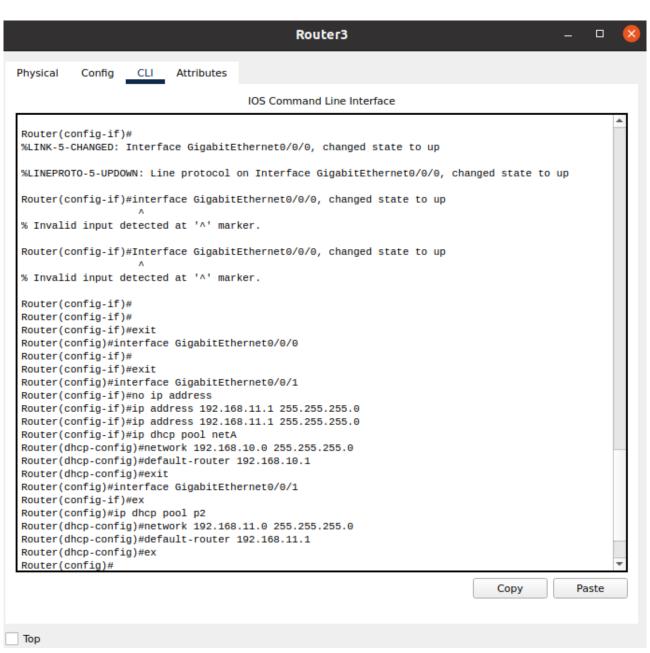
Router IP Configuration:

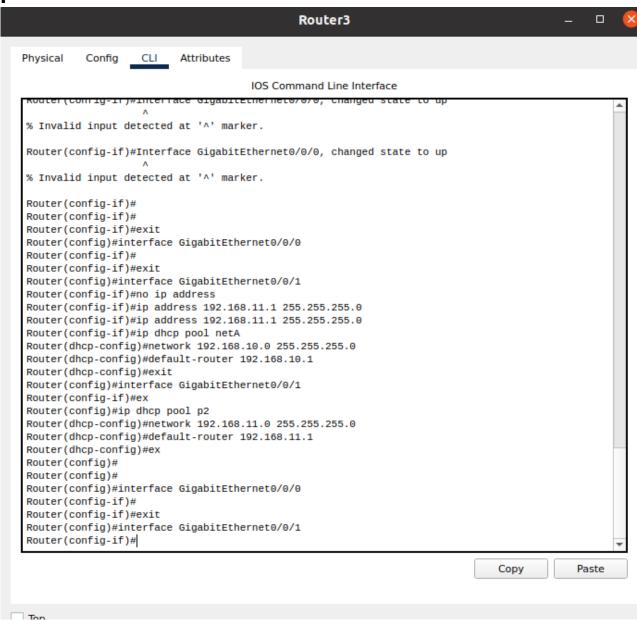




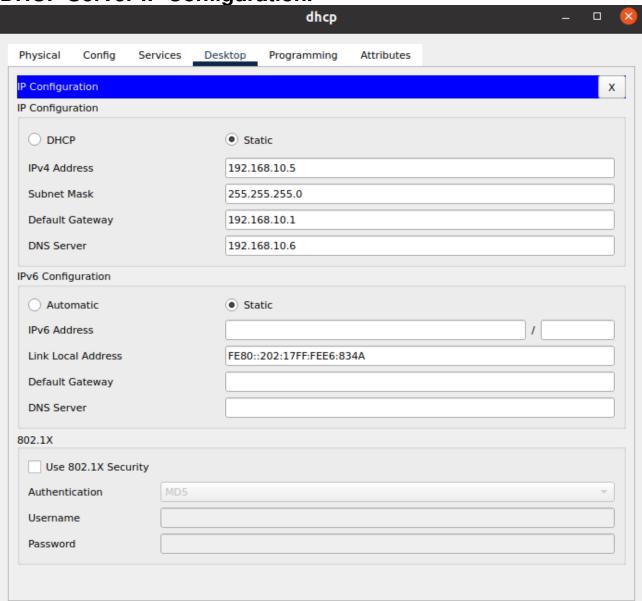
IP Configuration Of Router Using CLI:



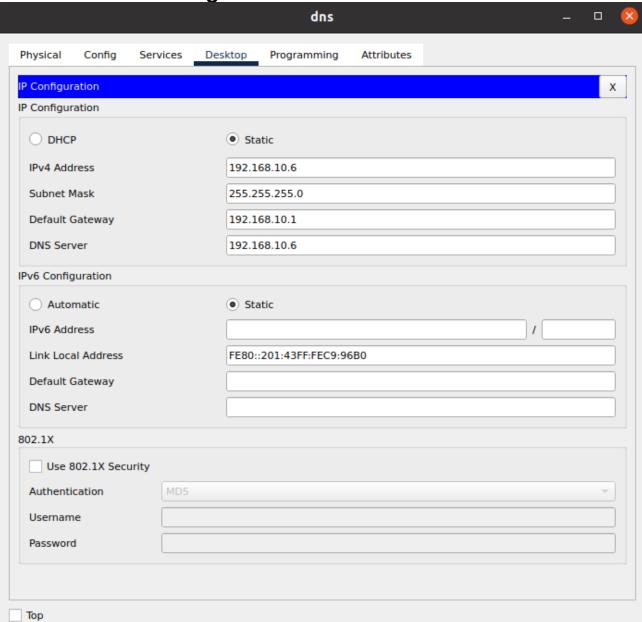




DHCP Server IP Configuration:

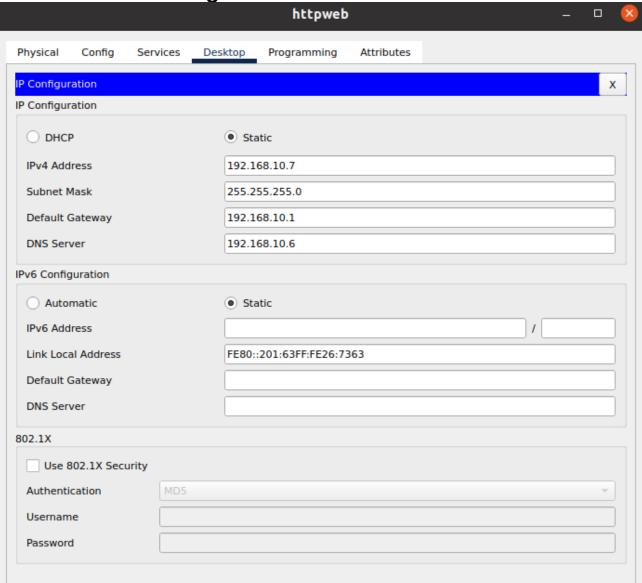


DNS Server IP Configuration:

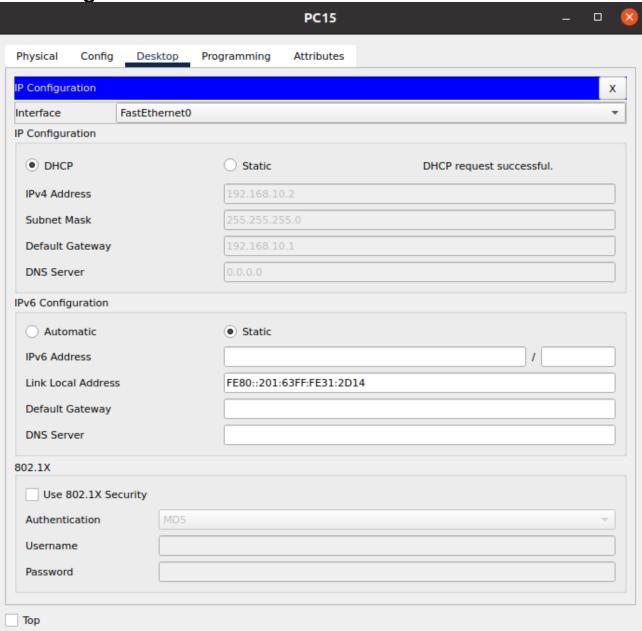


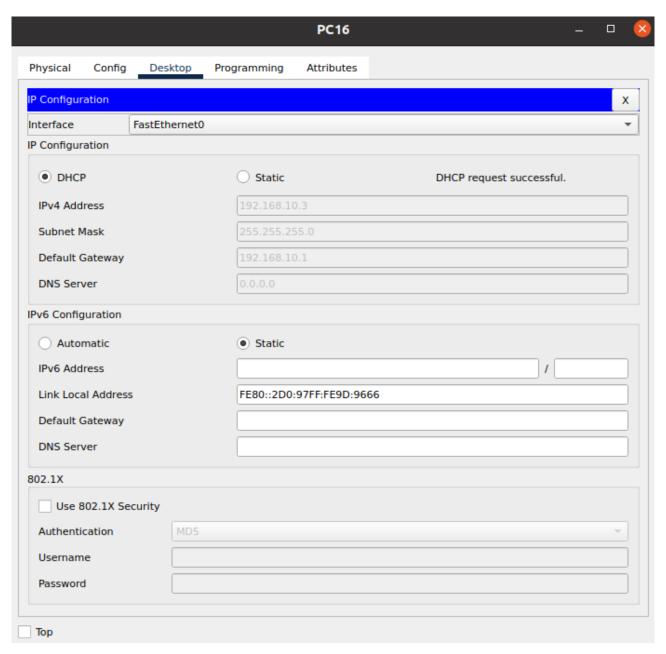
_

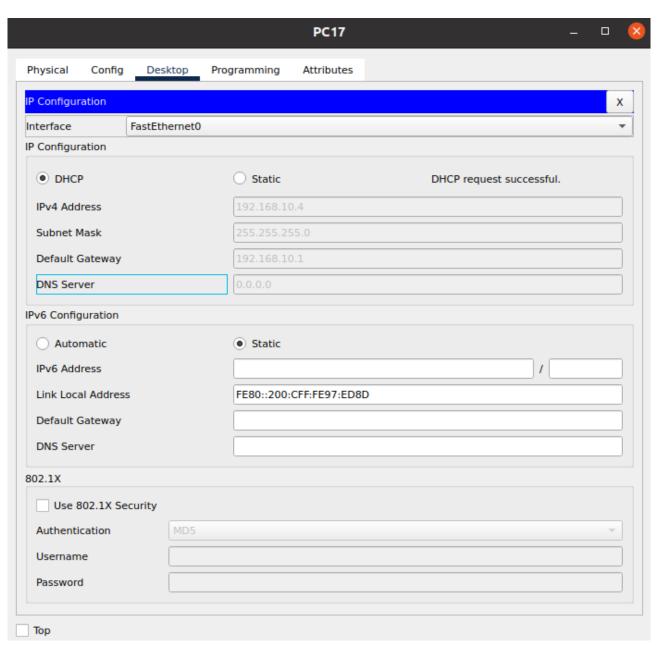
Web Server IP Configuration:



Selecting DHCP On PC's:







_

Ping Test: Ping PC-17 from PC-15.

```
C:\>ping 192.168.10.4

Pinging 192.168.10.4 with 32 bytes of data:

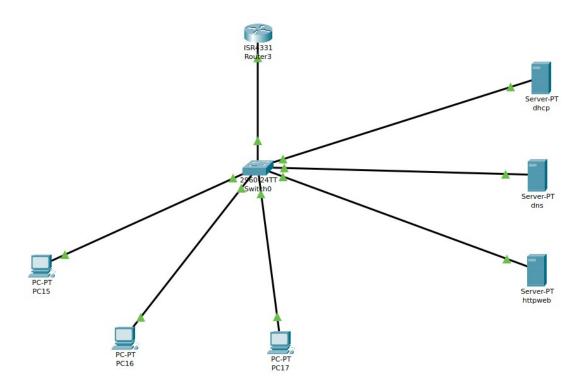
Reply from 192.168.10.4: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.10.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

Whole Topology:

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PC's:

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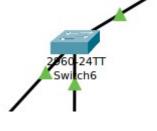
.





Switch:

.

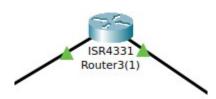


.



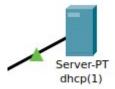
.

.



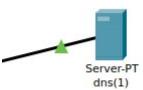
Servers:

_

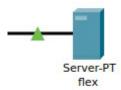


•

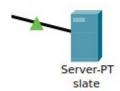
.



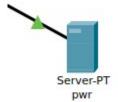




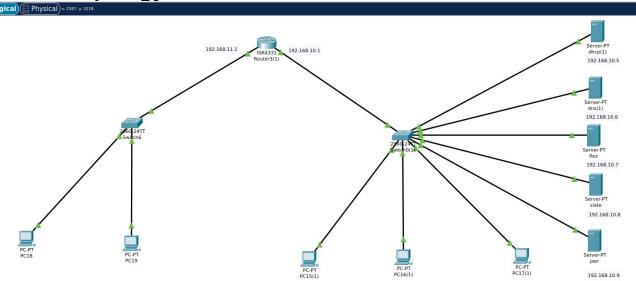
•



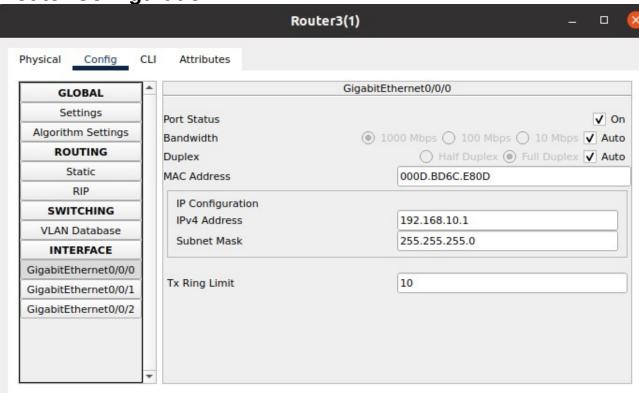
••

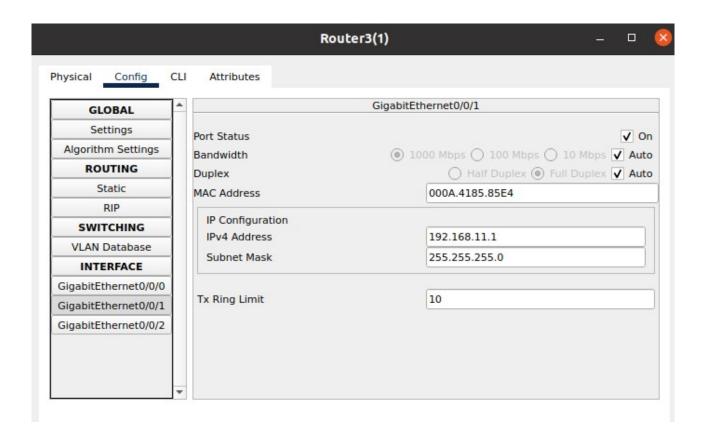


Whole Topology:



Router Configuration:

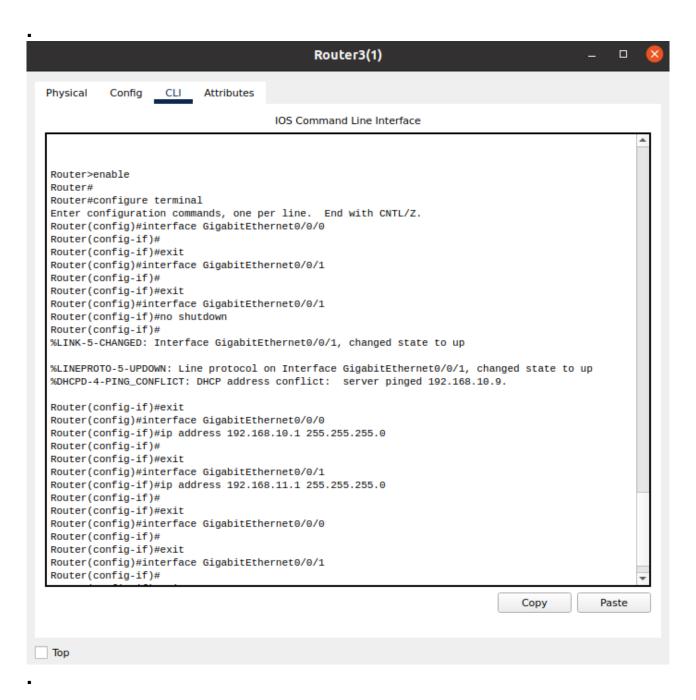




CLI:

Router3(1) Physical Config CLI Attributes IOS Command Line Interface Router(config-if)# Router(config-if)# Router(config-if)#ip address 192.168.10.1 255.255.255.0 Router(config-if)#ip address 192.168.10.1 255.255.255.0 Router(config-if)#no shutdown Router(config-if)# Router(config-if)#exit Router(config)#interface GigabitEthernet0/0/0 Router(config-if)# Router(config-if)#exit Router(config)#interface GigabitEthernet0/0/1 Router(config-if)# Router(config-if)#exit Router(config)#interface GigabitEthernet0/0/0 Router(config-if)# Router(config-if)#exit Router(config)#interface GigabitEthernet0/0/1 Router(config-if)# Router(config-if)# Router(config-if)# Router(config-if)# Router(config-if)# Router(config-if)# Router(config-if)# Router(config-if)#ip dhcp pool netA Router(dhcp-config)#network 192.168.10.0 255.255.255.0 Router(dhcp-config)#default-router 192.168.10.1 Router(dhcp-config)#exit Router(config)#interface GigabitEthernet0/0/1 Router(config-if)#ex Router(config)#ip dhcp pool p2 Router(dhcp-config)#network 192.168.11.0 % Incomplete command. Router(dhcp-config)#network 192.168.11.0 255.255.255.0 Copy Paste

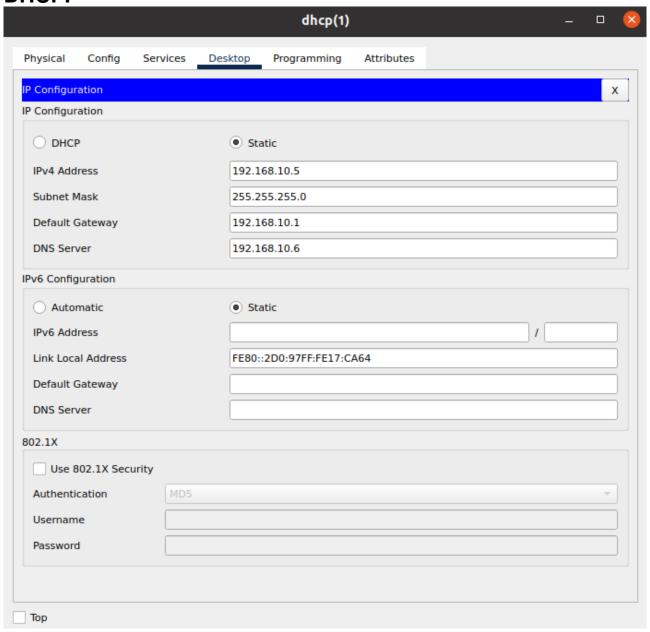
	Router3(1)	-	- 🗆 🔇
Physical Config CLI Attributes			
	IOS Command Line Interface		
Router(config)#ip uncp poof p2 Router(dhcp-config)#network 192.168 % Incomplete command. Router(dhcp-config)#network 192.168 Router(dhcp-config)#default-router Router(dhcp-config)#ex Router(config)#	.11.0 255.255.255.0		
Press RETURN to get started.			
		Сору	Paste
Тор			



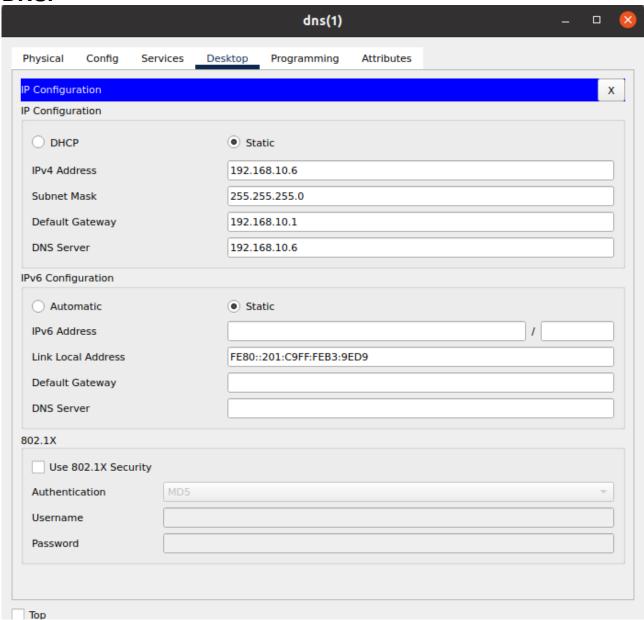
Router(config)#interface GigabitEthernet0/0/1 Router(config-if)#no shutdown Router(config-if)# %LINK-5-CHANGED: Interface GigabitEthernet0/0/1, changed state to up %LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/1, changed state to up %DHCPD-4-PING_CONFLICT: DHCP address conflict: server pinged 192.168.10.9. Router(config-if)#exit Router(config)#interface GigabitEthernet0/0/0 Router(config-if)#ip address 192.168.10.1 255.255.255.0 Router(config-if)# Router(config-if)#exit Router(config)#interface GigabitEthernet0/0/1 Router(config-if)#ip address 192.168.11.1 255.255.255.0 Router(config-if)# Router(config-if)#exit Router(config)#interface GigabitEthernet0/0/0 Router(config-if)# Router(config-if)#exit Router(config)#interface GigabitEthernet0/0/1 Router(config-if)# Router(config-if)#exit Router(config)#interface GigabitEthernet0/0/0 Router(config-if)# Paste Copy

Тор

IP Configuration Of Servers: DHCP:



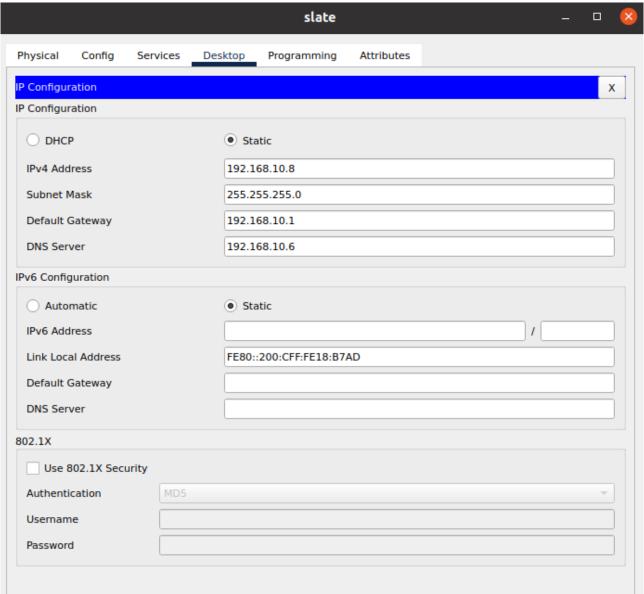
DNS:



Flex:

			flex		_	. 🗆
Physical Config Se	rvices [Desktop	Programming	Attributes		
P Configuration						Х
P Configuration						
OHCP		• Sta	atic			
IPv4 Address		192.1	68.10.7			
Subnet Mask		255.2	55.255.0			
Default Gateway		192.1	68.10.1			
DNS Server		192.1	68.10.6			
v6 Configuration						
O Automatic		Sta	atic			
IPv6 Address					/	
Link Local Address		FE80:	:290:21FF:FE93:7	2A9		
Default Gateway						
DNS Server						
302.1X						
Use 802.1X Security						
Authentication	MD5					-
Username						
Password						

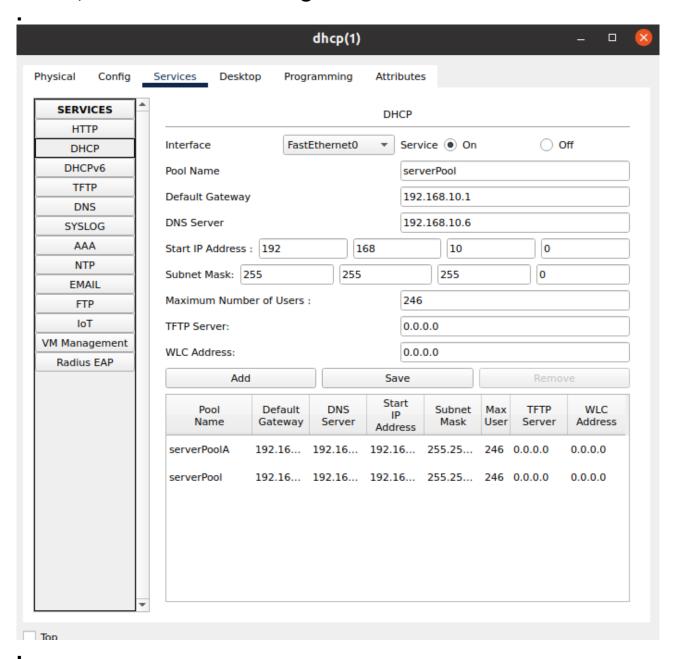
Slate:

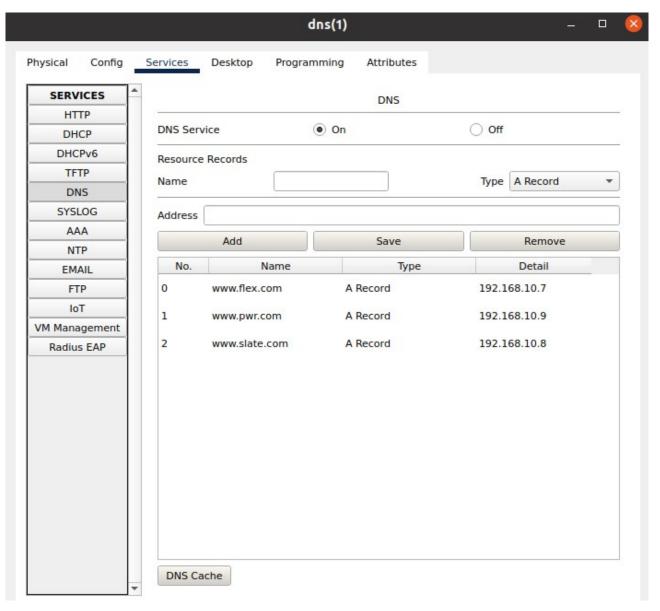


Pwr:

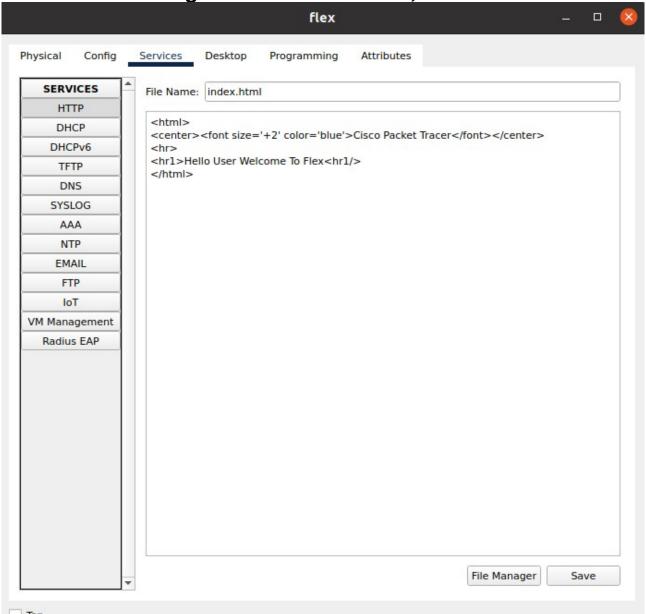
			рwг			_		(2
Physical Config	Services	Desktop	Programming	Attributes				
P Configuration								Х
P Configuration								
ODHCP		Sta	atic					
IPv4 Address		192.1	68.10.9					
Subnet Mask		255.2	55.255.0					5
Default Gateway		192.1	68.10.1					5
DNS Server		192.1	68.10.6					5
Pv6 Configuration								
Automatic		Sta	atic					
IPv6 Address								
Link Local Address		FE80:	:201:C9FF:FE7A:7	03D				5
Default Gateway								51
DNS Server								5
302.1X								
Use 802.1X Securi	tv							
Authentication	MD5						-	٦
Username								ĭ.
Password								51

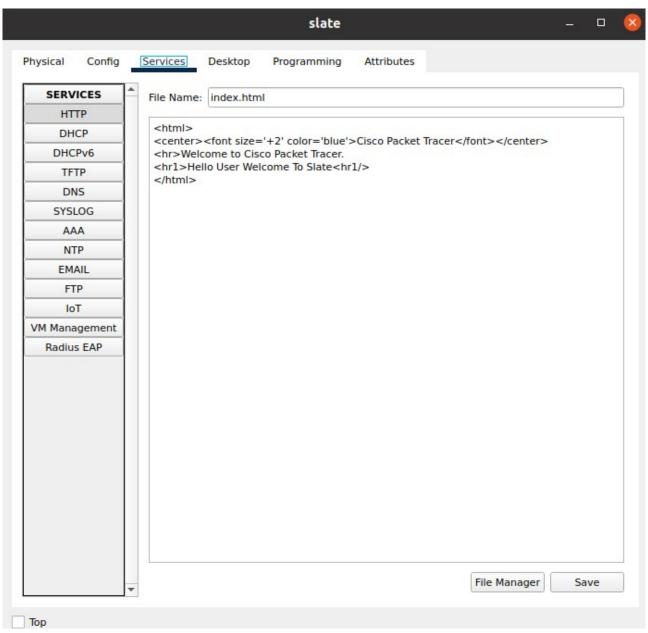
DHCP,HTTP And DNS Configurations:



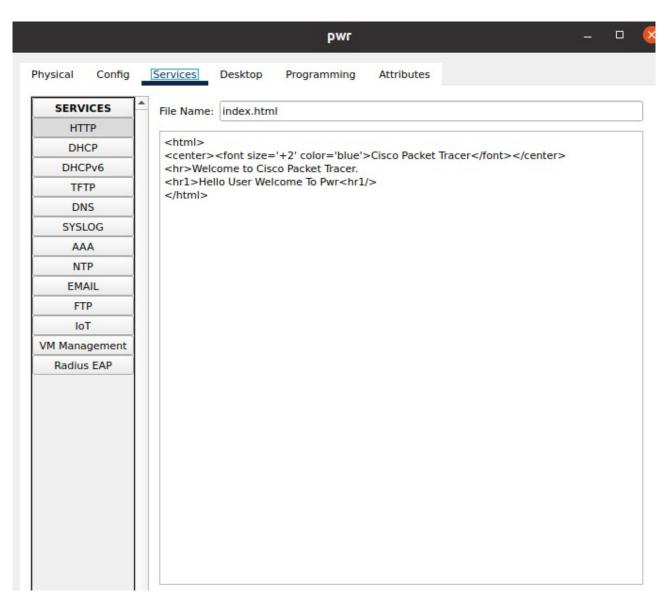


Index.HTML Changes in HTTPS OF Flex,Slate And Pwr:

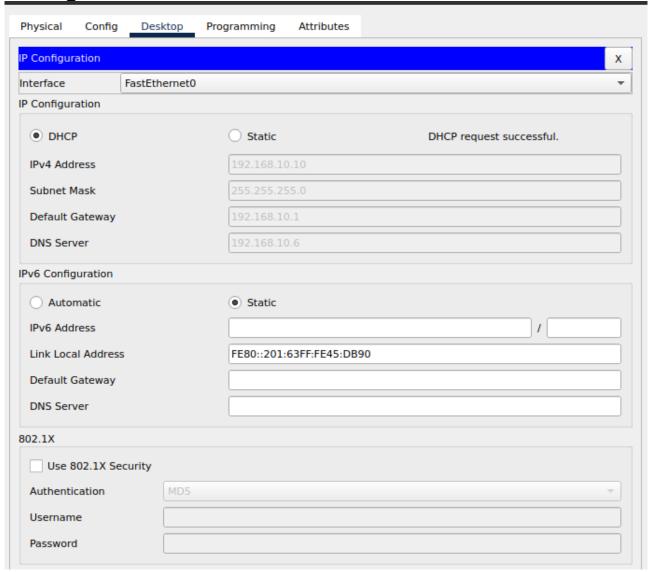


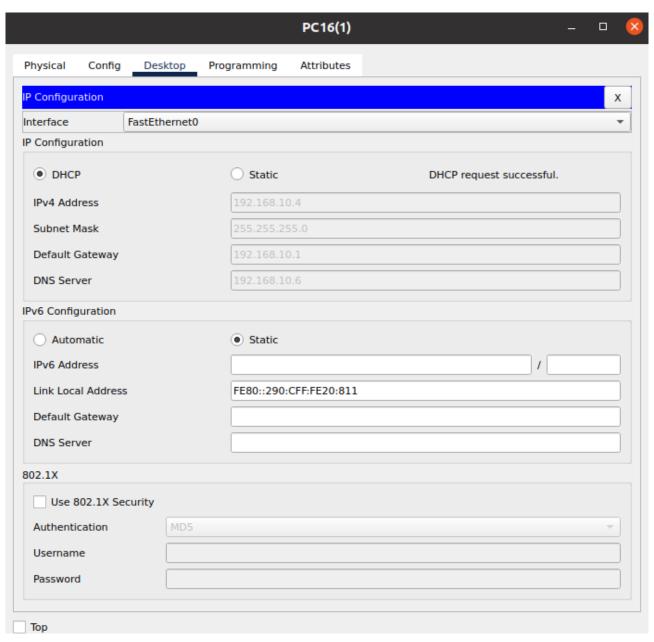


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Setting DHCP ON PC's:





Configuration		
	hernet0	
P Configuration		
DHCP	O Static	DHCP request successful.
IPv4 Address	192.168.10.2	
Subnet Mask	255.255.255.0	
Default Gateway	192.168.10.1	
DNS Server	0.0.0.0	
Pv6 Configuration		
O Automatic	Static	
IPv6 Address		1
Link Local Address	FE80::210:11FF:FE35:E	447
Default Gateway		
DNS Server		
802.1X		
Use 802.1X Security		
Authentication	MD5	-
Username		
Password		

