

DATA COMMUNICATION AND NETWORKING II

LAB MANUAL

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SEAT NO.: B21110006057

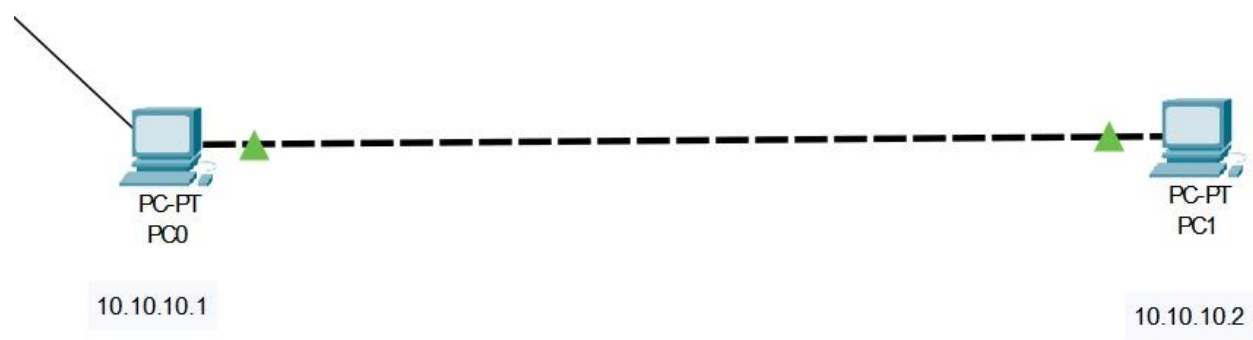
CLASS: BSCS-A (3RD YEAR)

SUBJECT: DATA COMMUNICATION AND NETWORKING II

COURSE CODE: 512

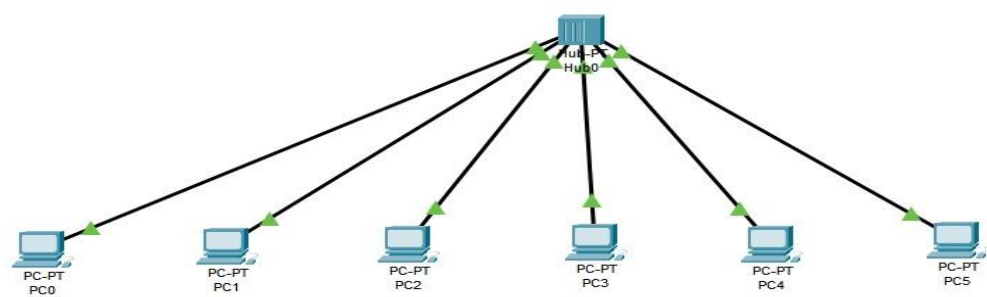
LAB TEACHER: MISS ATIA AGHA

PEER TO PEER CONNECTION



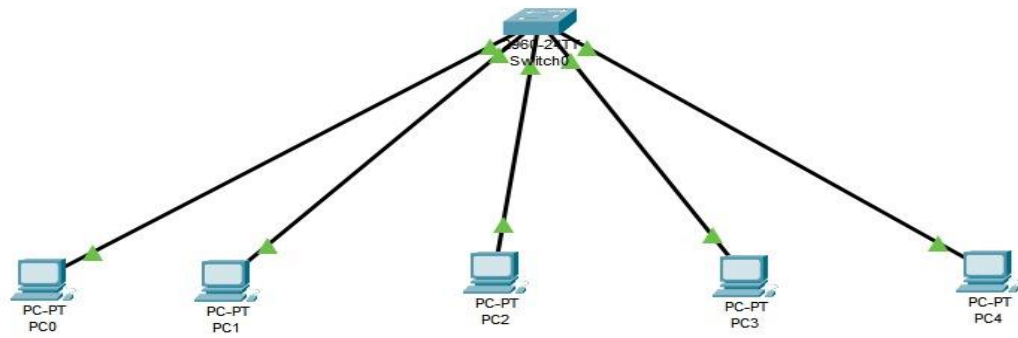
Scenario 0											
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete	
	Successful	PC0	PC1	ICMP		0.000	N	0	(edit)	(delete)	
	Successful	PC1	PC0	ICMP		0.000	N	1	(edit)	(delete)	

HUB



Scenario 0											
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete	
	Successful	PC0	PC2	ICMP		0.000	N	0	(edit)	(delete)	
	Successful	PC1	PC5	ICMP		0.000	N	1	(edit)	(delete)	
	Successful	PC2	PC3	ICMP		0.000	N	2	(edit)	(delete)	

SWITCH



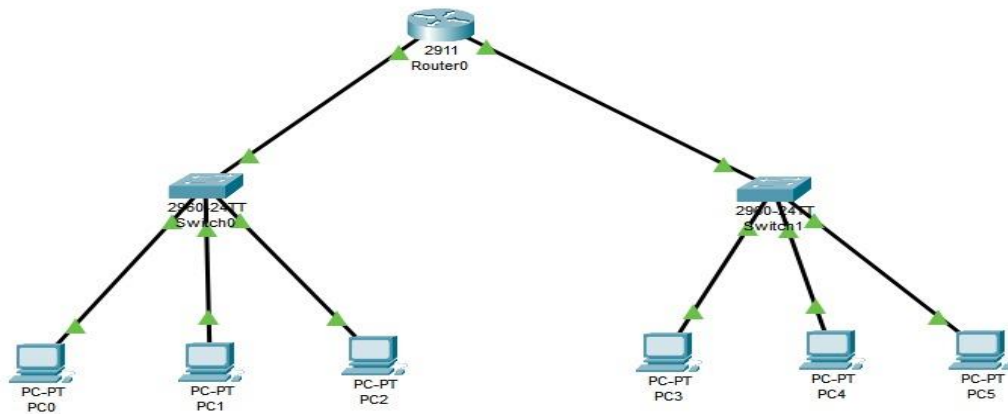
Scenario 0

NewDelete

PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC2	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC1	PC4	ICMP		0.000	N	1	(edit)	(delete)
	Successful	PC2	PC3	ICMP		0.000	N	2	(edit)	(delete)

ROUTER











Scenario 0

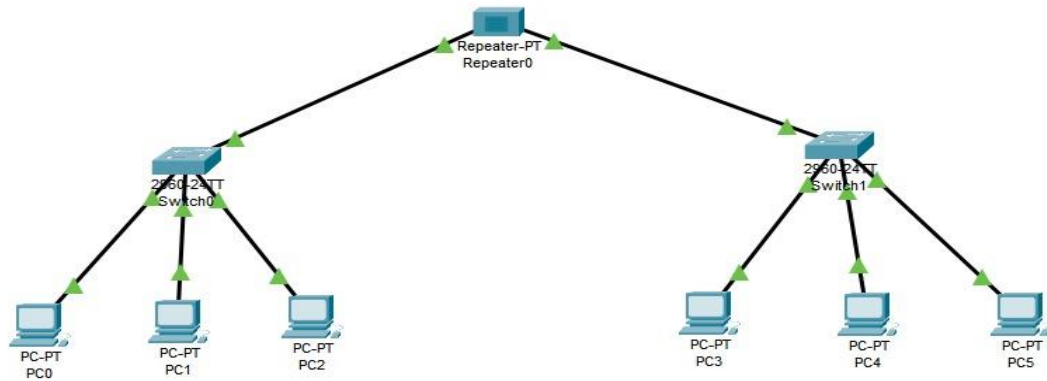
w

Delete

PDU List Window

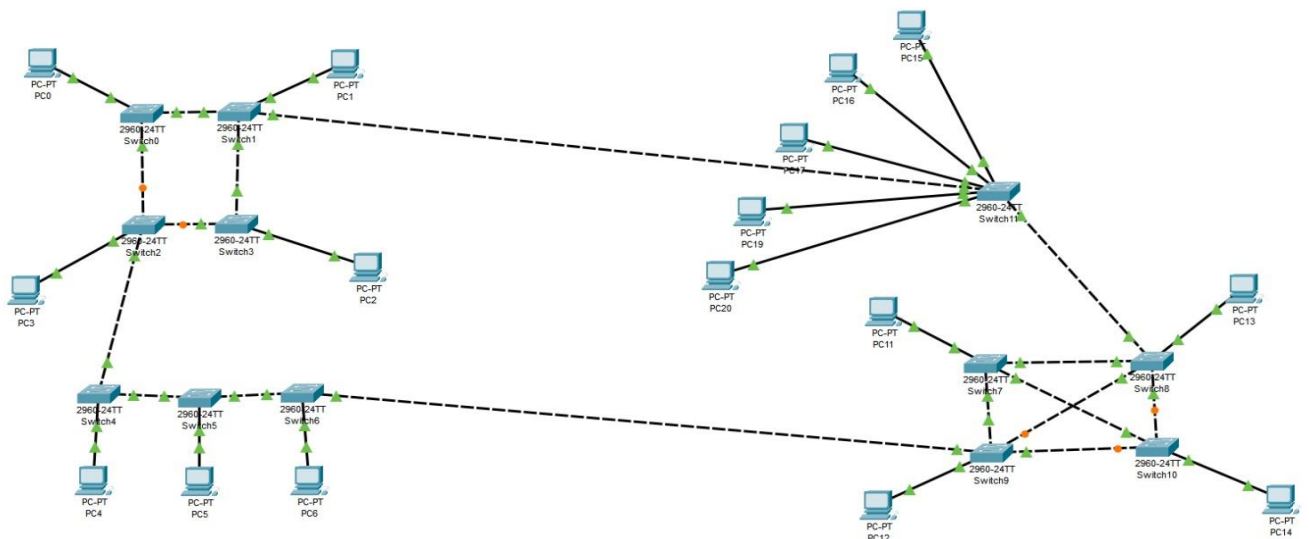
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC1	PC5	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC0	PC3	ICMP		0.000	N	1	(edit)	(delete)
	Successful	PC1	PC4	ICMP		0.000	N	2	(edit)	(delete)
	Successful	PC2	PC3	ICMP		0.000	N	3	(edit)	(delete)

REPEATER



Realtime											
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete	
0	Successful	PC0	PC3	ICMP	Green	0.000	N	0	(edit)	(delete)	
1	Successful	PC1	PC5	ICMP	Purple	0.000	N	1	(edit)	(delete)	
2	Successful	PC1	PC3	ICMP	Green	0.000	N	2	(edit)	(delete)	

TOPOLOGY



Realtime											
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete	
3321	Successful	PC0	PC11	ICMP	Purple	0.000	N	0	(edit)	(delete)	
1941	Successful	PC4	PC13	ICMP	Green	0.000	N	1	(edit)	(delete)	
2201	Successful	PC2	PC16	ICMP	Purple	0.000	N	2	(edit)	(delete)	

Physical Config **Desktop** Programming Attributes

Command Prompt

Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.1

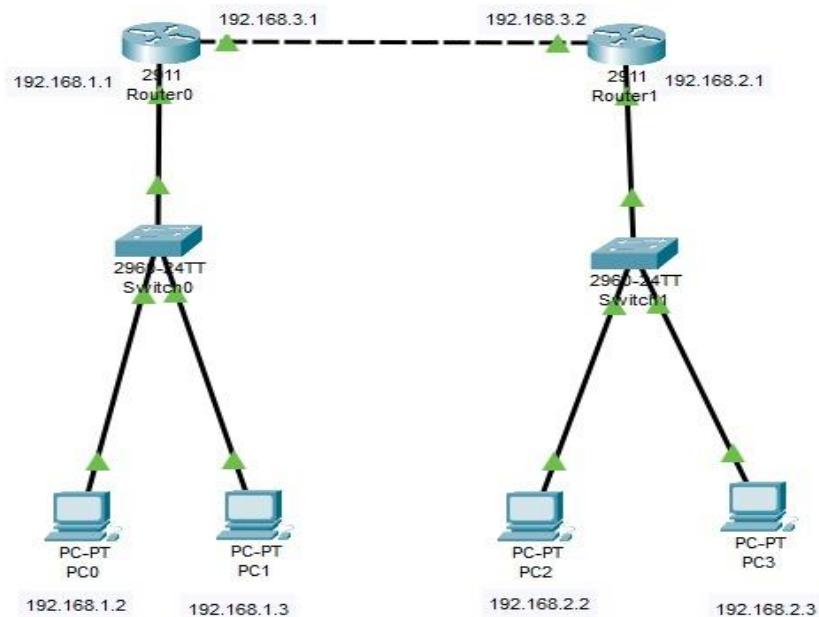
Pinging 192.168.0.1 with 32 bytes of data:

Reply from 192.168.0.1: bytes=32 time=10ms TTL=128
Reply from 192.168.0.1: bytes=32 time<1ms TTL=128
Reply from 192.168.0.1: bytes=32 time<1ms TTL=128
Reply from 192.168.0.1: bytes=32 time=19ms TTL=128

Ping statistics for 192.168.0.1:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 19ms, Average = 7ms

C:\>

STATIC ROUTING



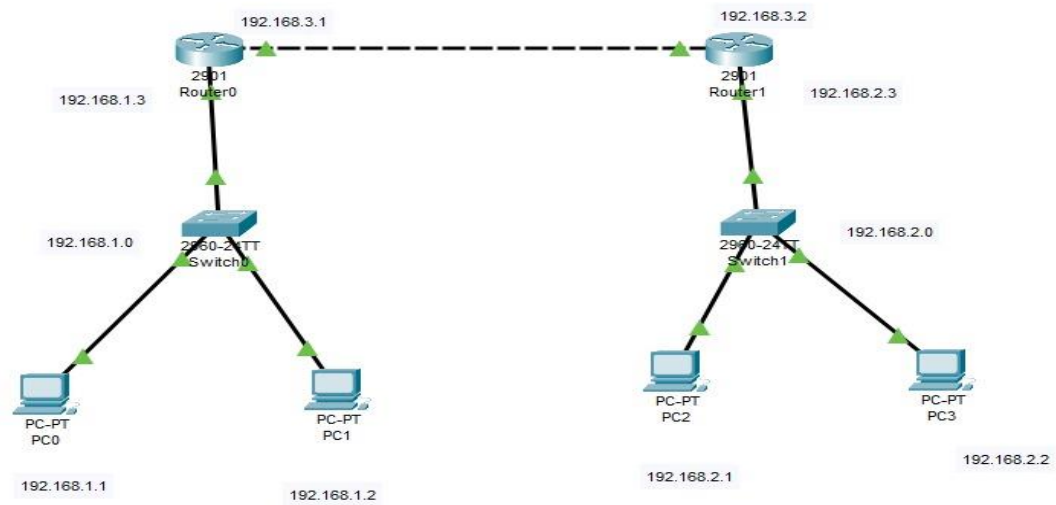
Scenario 0 ▼

Delete

List Window

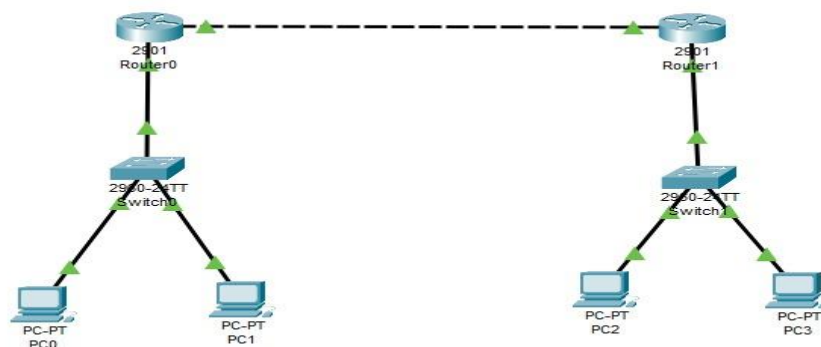
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC2	ICMP		0.000	N	0	(edit)	
	Successful	PC1	PC3	ICMP		0.000	N	1	(edit)	
	Successful	PC1	PC3	ICMP		0.000	N	2	(edit)	

STATIC ROUTING USING CLI



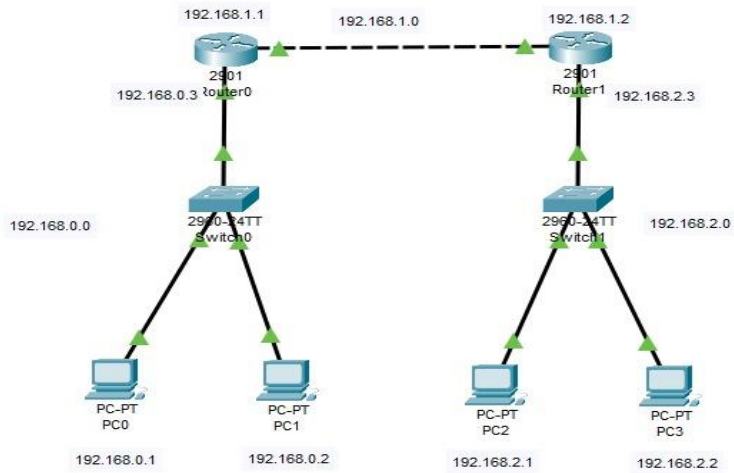
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC2	ICMP	Green	0.000	N	0	(edit)	(delete)
	Successful	PC1	PC3	ICMP	Green	0.000	N	1	(edit)	(delete)
	Successful	PC0	PC2	ICMP	Purple	0.000	N	2	(edit)	(delete)

DYNAMIC ROUTING RIP



Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC2	ICMP	Blue	0.000	N	0	(edit)	(delete)
	Successful	PC1	PC3	ICMP	Blue	0.000	N	1	(edit)	(delete)

DYNAMIC ROUTING USING CLI







Scenario 0

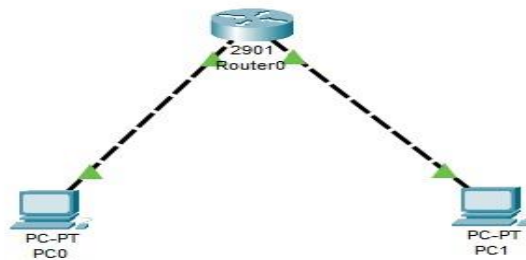
New

Delete

Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC2	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC1	PC3	ICMP		0.000	N	1	(edit)	(delete)

DHCP ON ROUTER







Scenario 0

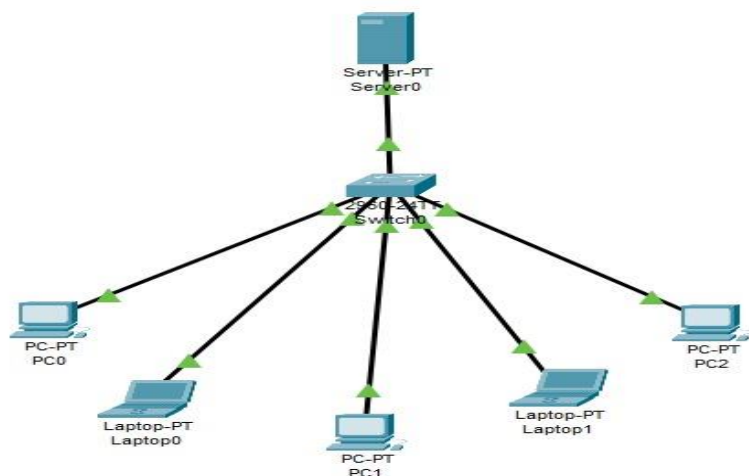
New

Delete

Toggle PDU List Window

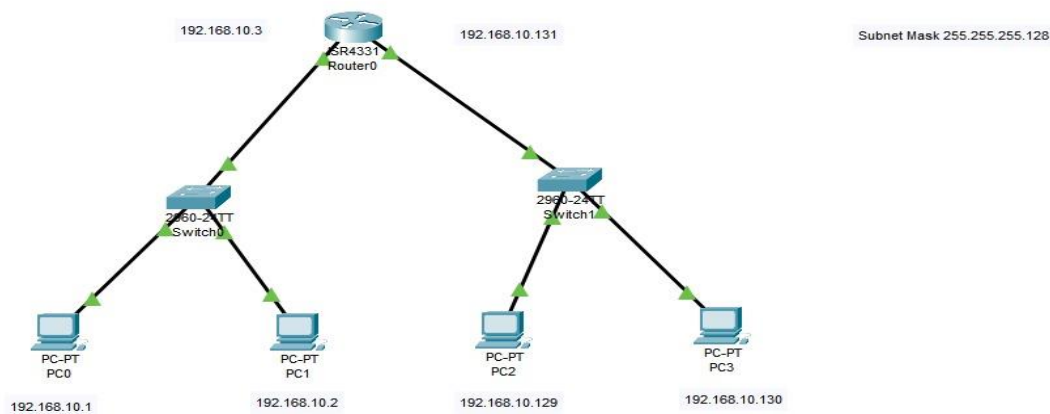
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC1	ICMP		0.000	N	0	(edit)	
	Successful	PC0	PC1	ICMP		0.000	N	1	(edit)	

DHCP ON SERVER



Scenario 0											
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete	
	Successful	Server0	Laptop0	ICMP	Blue	0.000	N	0	(edit)		
	Successful	PC0	Laptop1	ICMP	Yellow	0.000	N	1	(edit)		
	Successful	PC1	Laptop1	ICMP	Purple	0.000	N	2	(edit)		

SUBNETTING



Scenario 0											
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete	
	Successful	PC0	Router0	ICMP	Pink	0.000	N	0	(edit)	(delete)	
	Successful	PC0	PC3	ICMP	Blue	0.000	N	1	(edit)	(delete)	
	Successful	PC1	PC2	ICMP	Purple	0.000	N	2	(edit)	(delete)	
	Successful	PC2	PC3	ICMP	Green	0.000	N	3	(edit)	(delete)	

SETTING PASSWORD ON SWITCH AND ROUTER

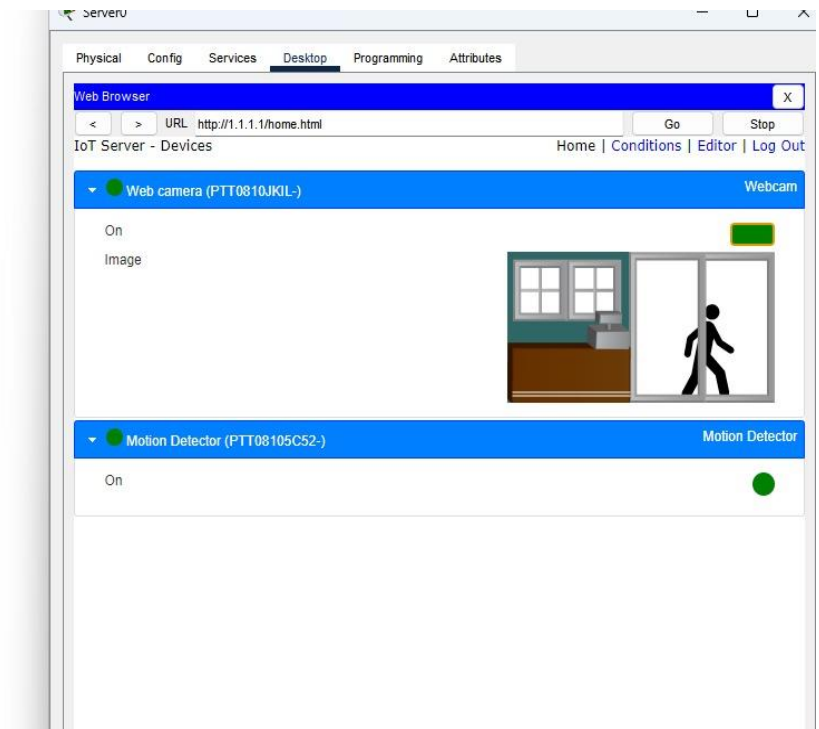
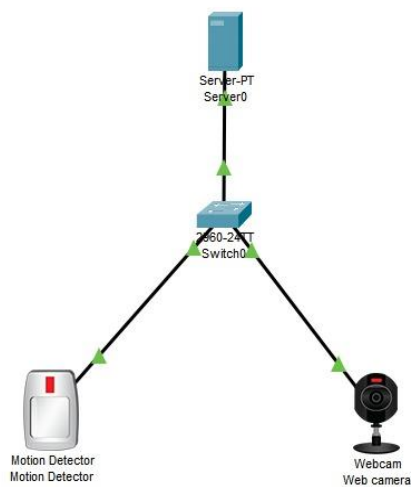


CLI -> en-> conf t-> enable password (Enter password)-> exit
show running->config
shows the password not safe.

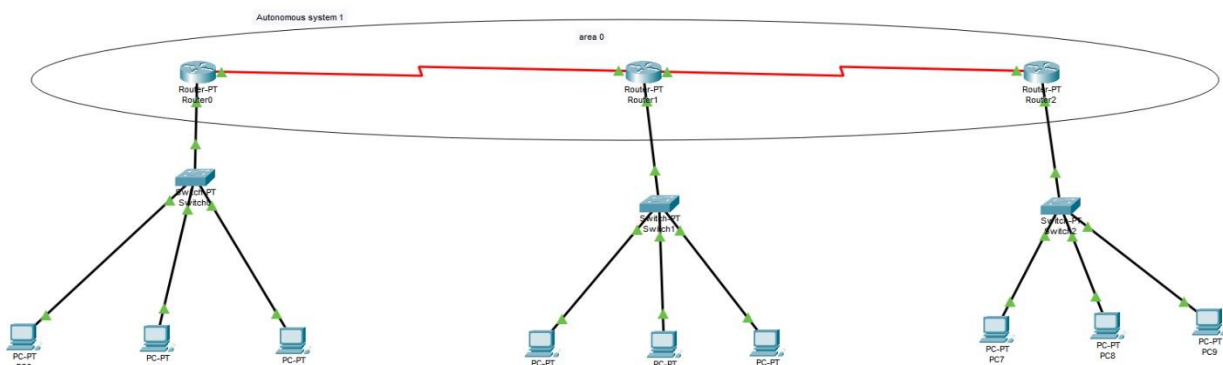


CLI -> en-> conf t-> enable secret (Enter password)-> exit
show running->config
shows the encrypted password safe.

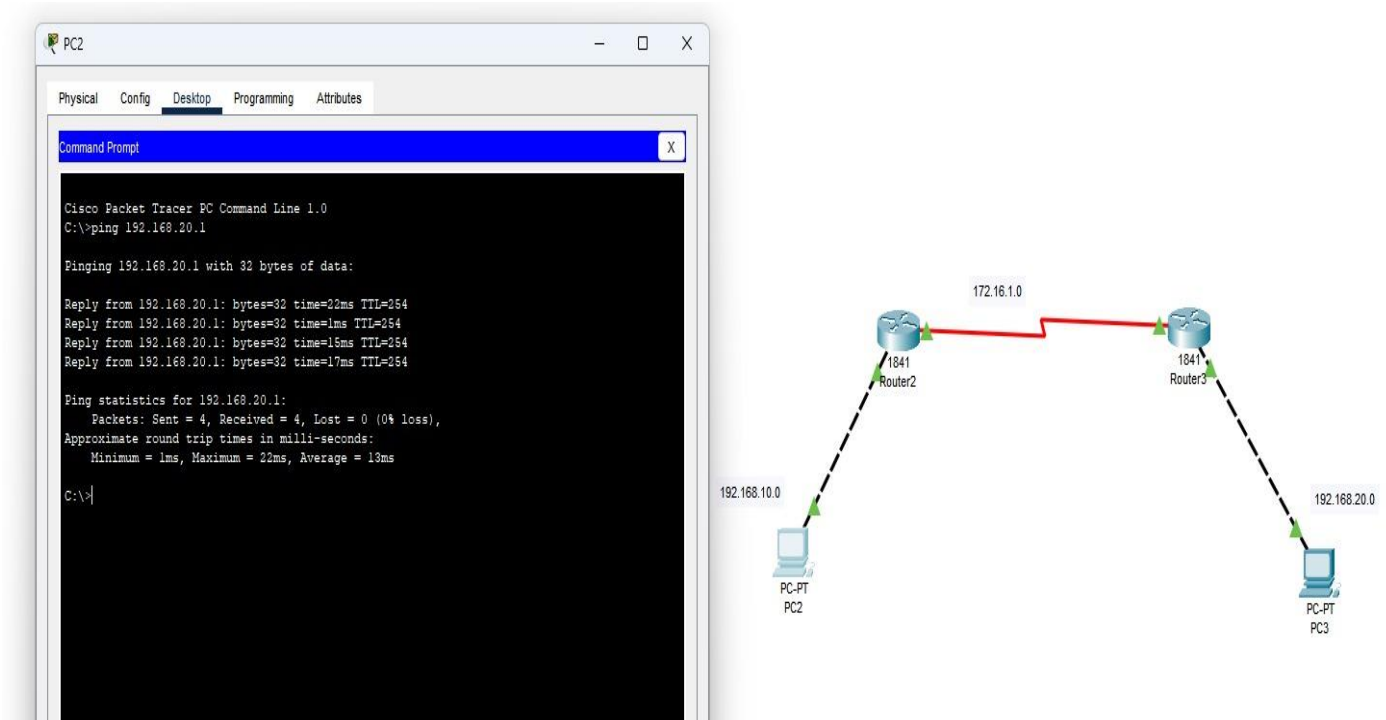
HOME AUTOMATION SYSTEM



OSPF



RIP V2



CONFIGURING RIP V2



Realtime Simula									
Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	E
	Successful	PC0	PC1	ICMP		0.000	N	0	(