Practical Exam

Computer Network

Name: Amey Thakur **Roll No.:** 50

Class: TE COMPS B **College ID:** TU3F1819127

Aim: Implementing a LAN network with Hybrid Topology.
[Bus Topology + Star Topology]

Hybrid Topology:

Hybrid topology is an integration of two or more different topologies to form a resultant topology which has many advantages (as well as disadvantages) of all the constituent basic topologies rather than having characteristics of one specific topology.

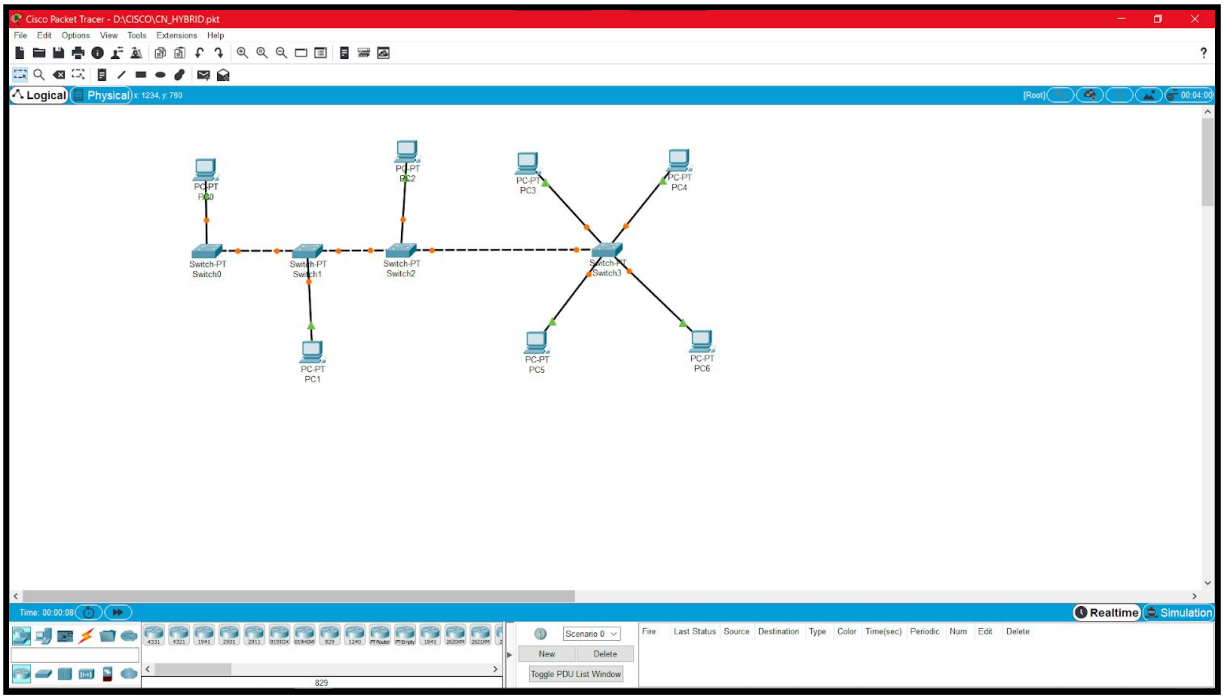
CISCO PACKET TRACER

Steps: [How I performed Hybrid by using Bus and Star Topology]

1. Selected 4 PCs from the devices menu to create a Star Topology with Switch PT.
2. Selected 3 PCs and 3 Switch PTs to create Bus Topology, respectively.
3. .Added 1CFE to the empty port.
4. Simulated the message transfer over the network.
5. Transmitted the messages from PC 0 to PC 5 successfully, across different topologies.

Output:

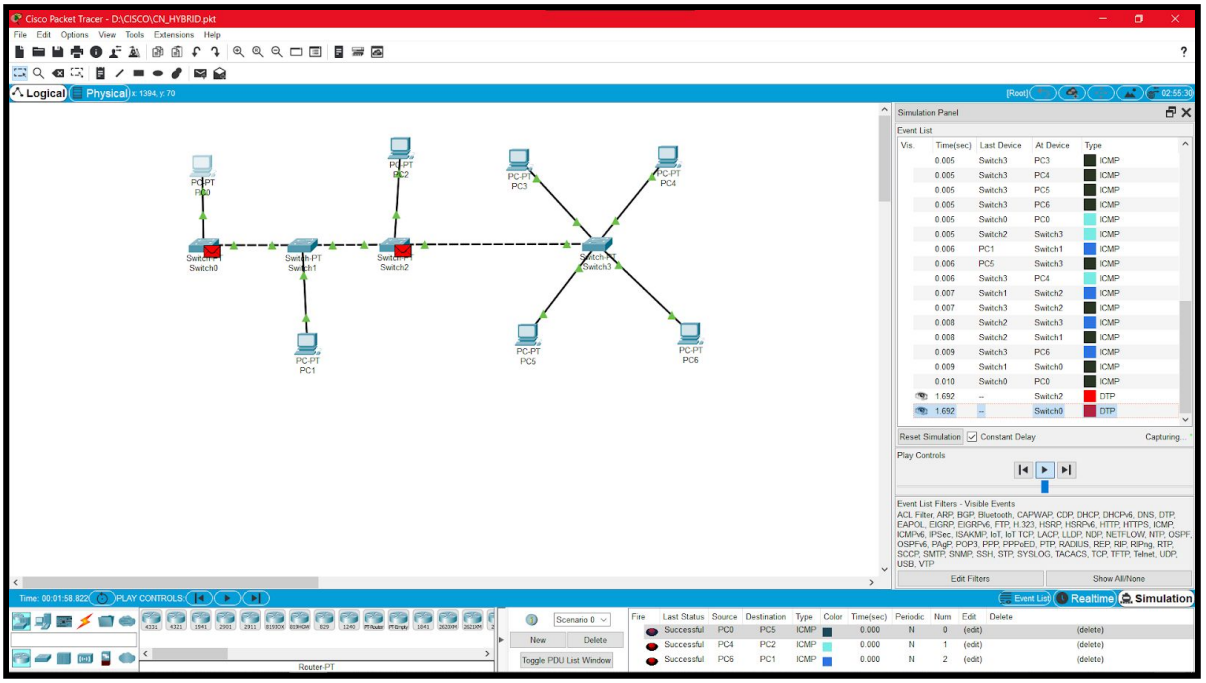
- Bus Topology + Star Topology connected via Switches



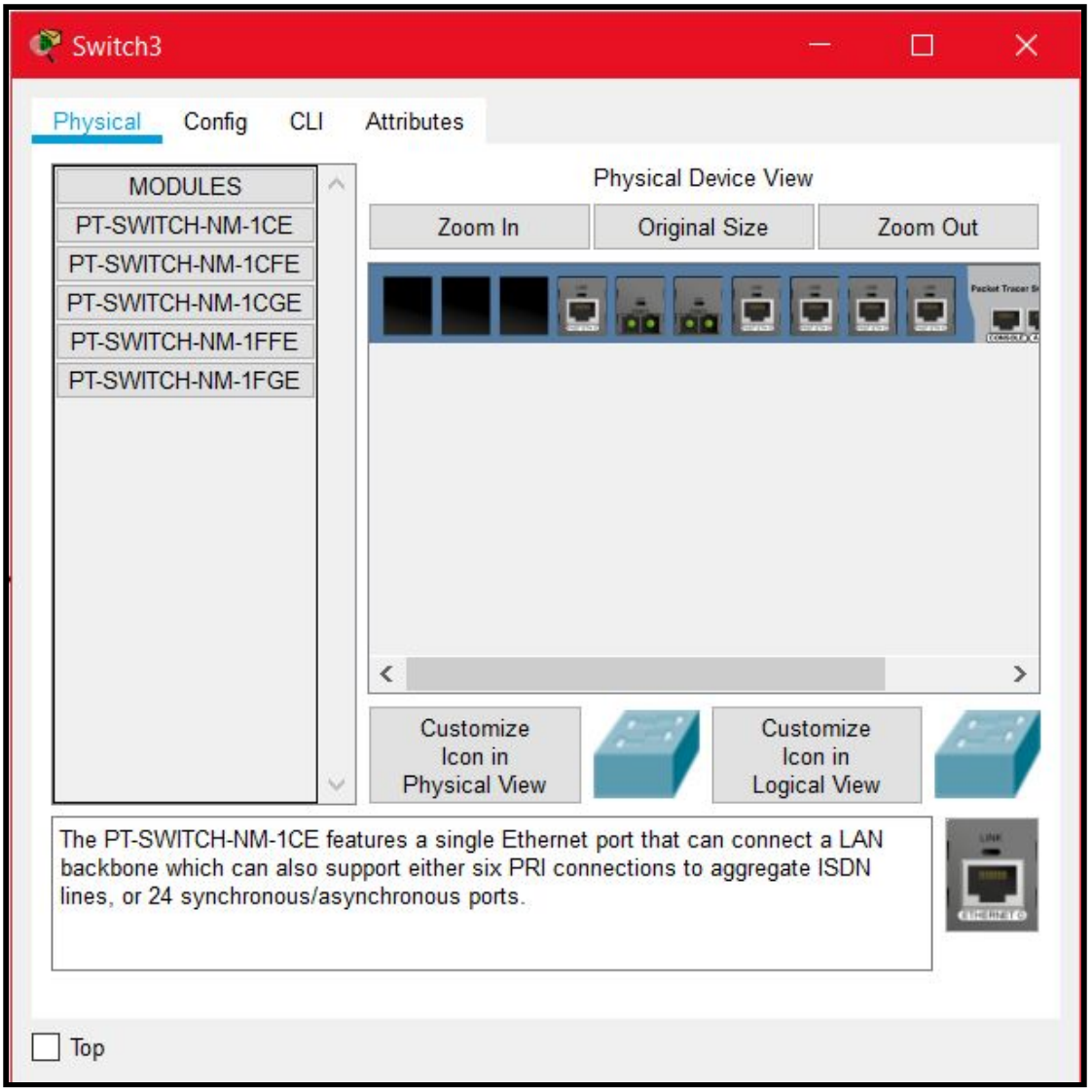
- Packet Successfully Delivered

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC5	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC4	PC2	ICMP		0.000	N	1	(edit)	(delete)
	Successful	PC6	PC1	ICMP		0.000	N	2	(edit)	(delete)

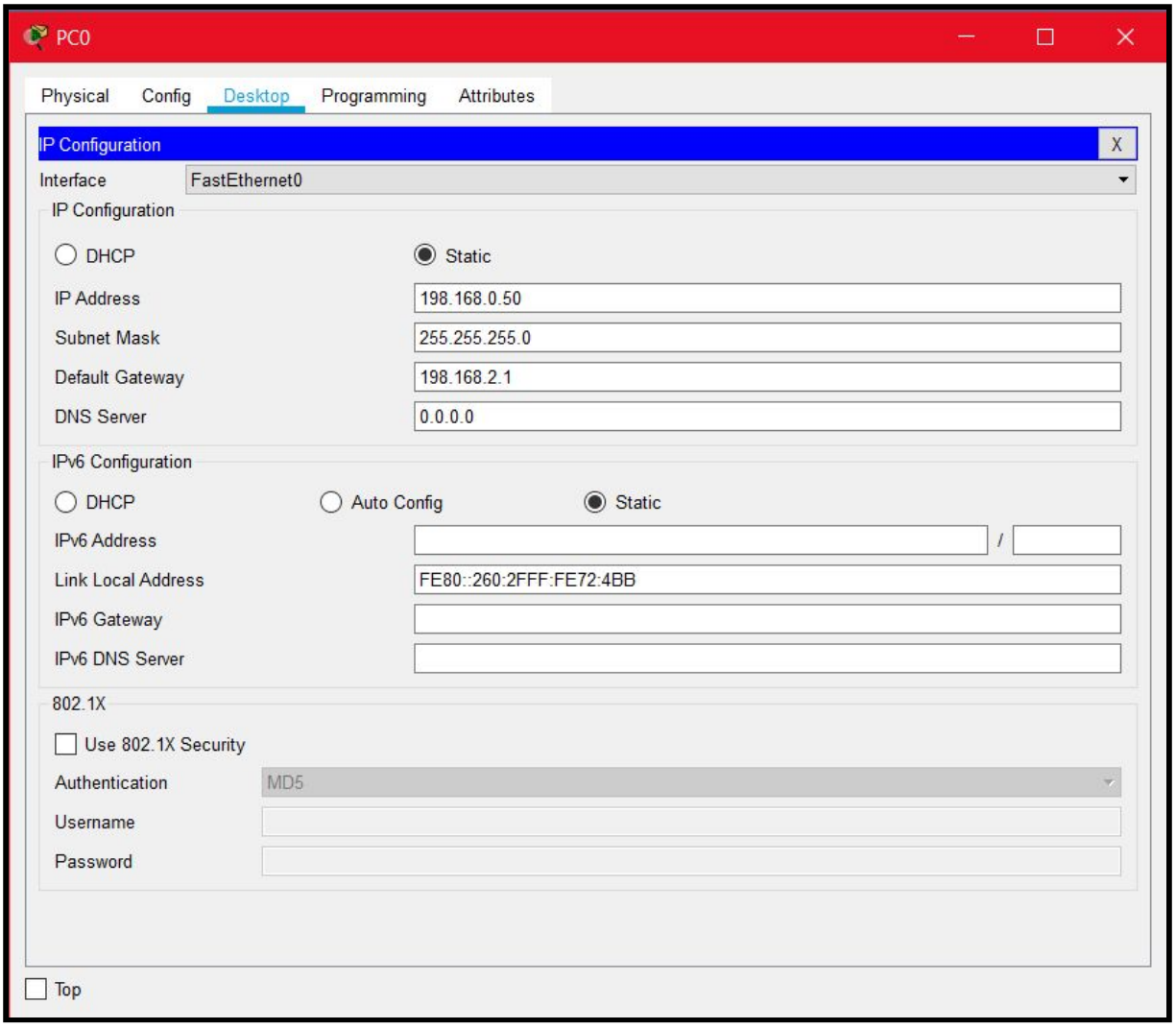
- Successful Simulation



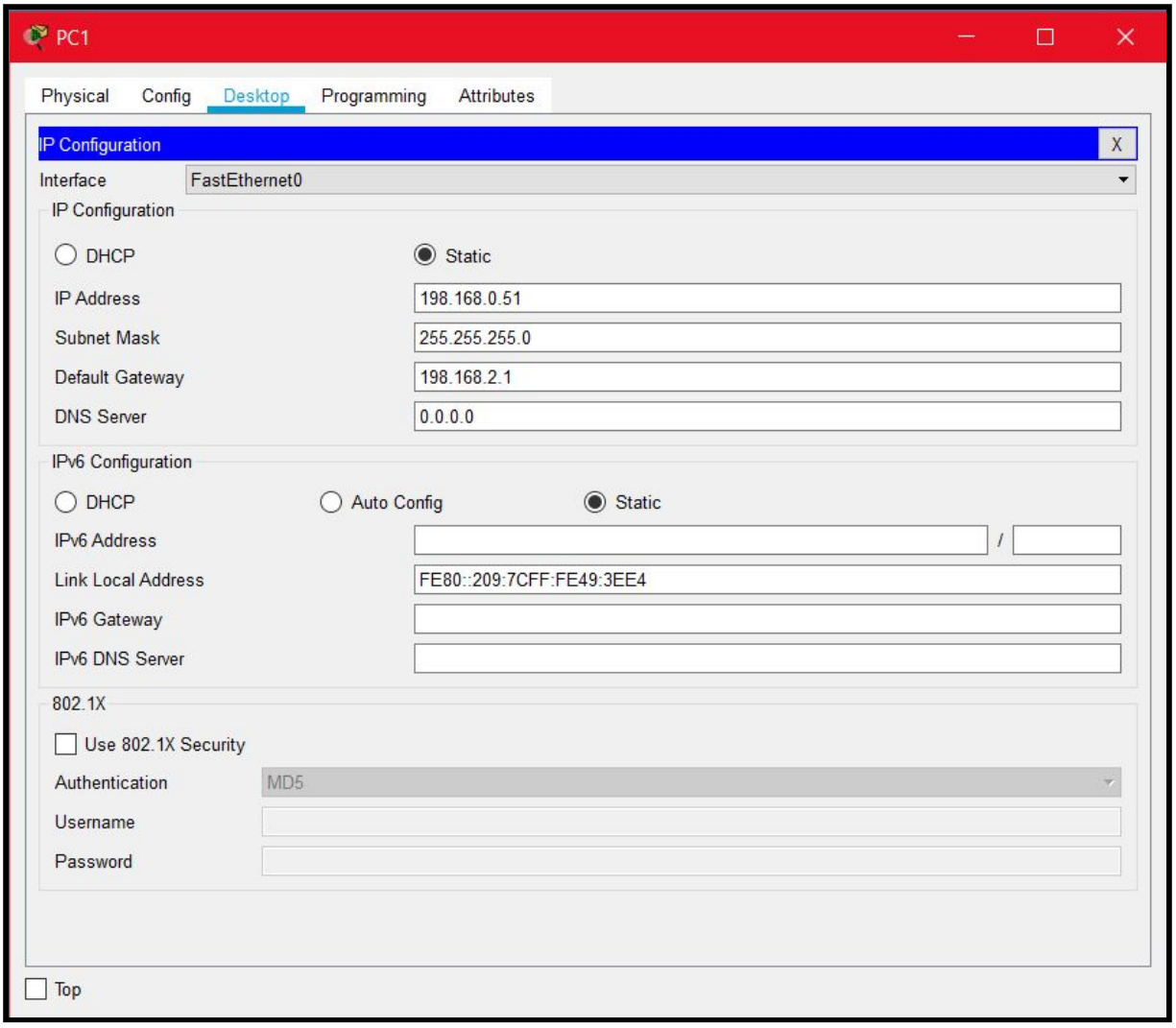
- Inserted Extra port in Switch



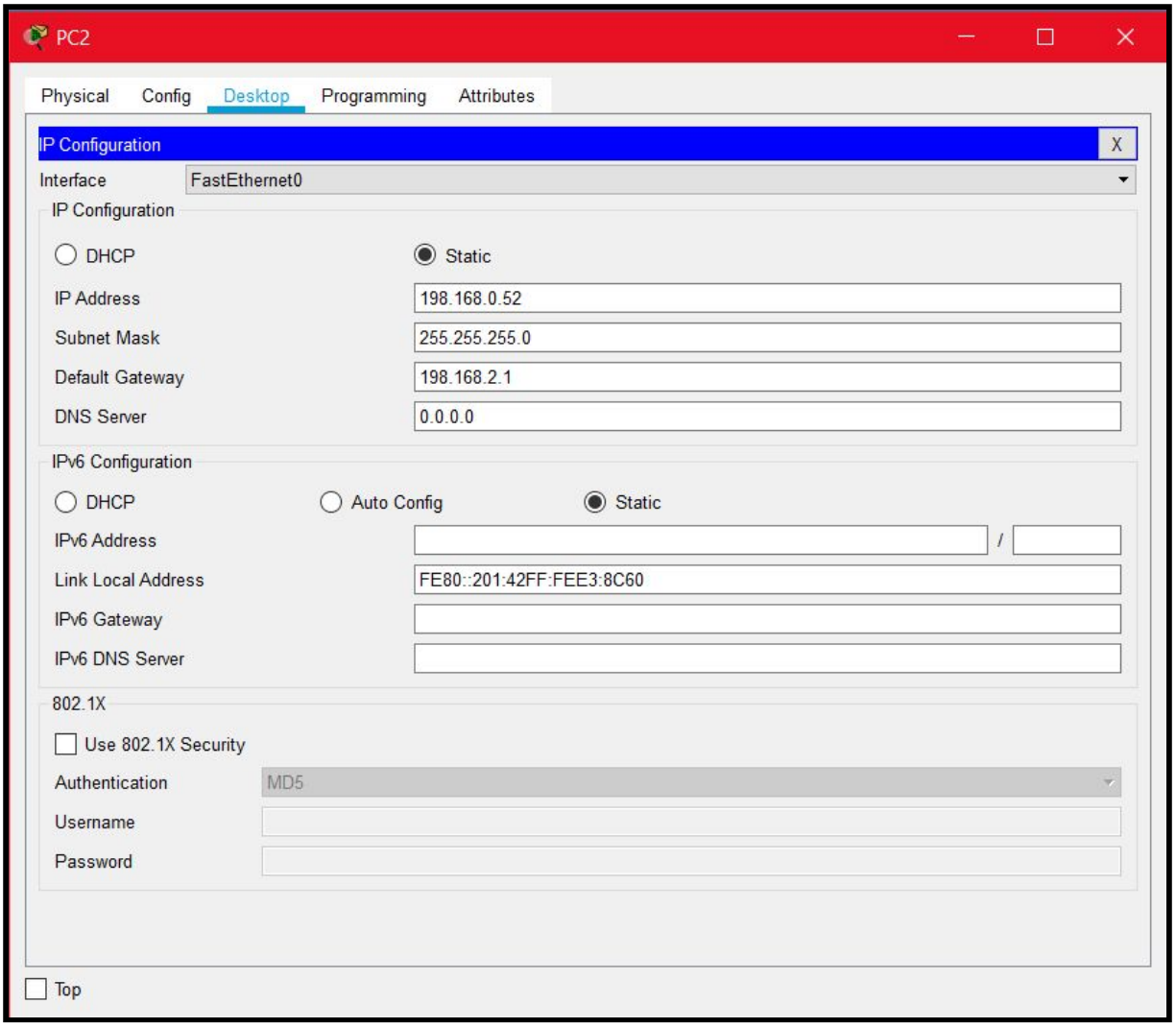
- PC 0 [IP: 198.168.0.**50**] **AMEY THAKUR TE B-50 ← My Roll Number**
  [Default Gateway: **198.168.2.1]**



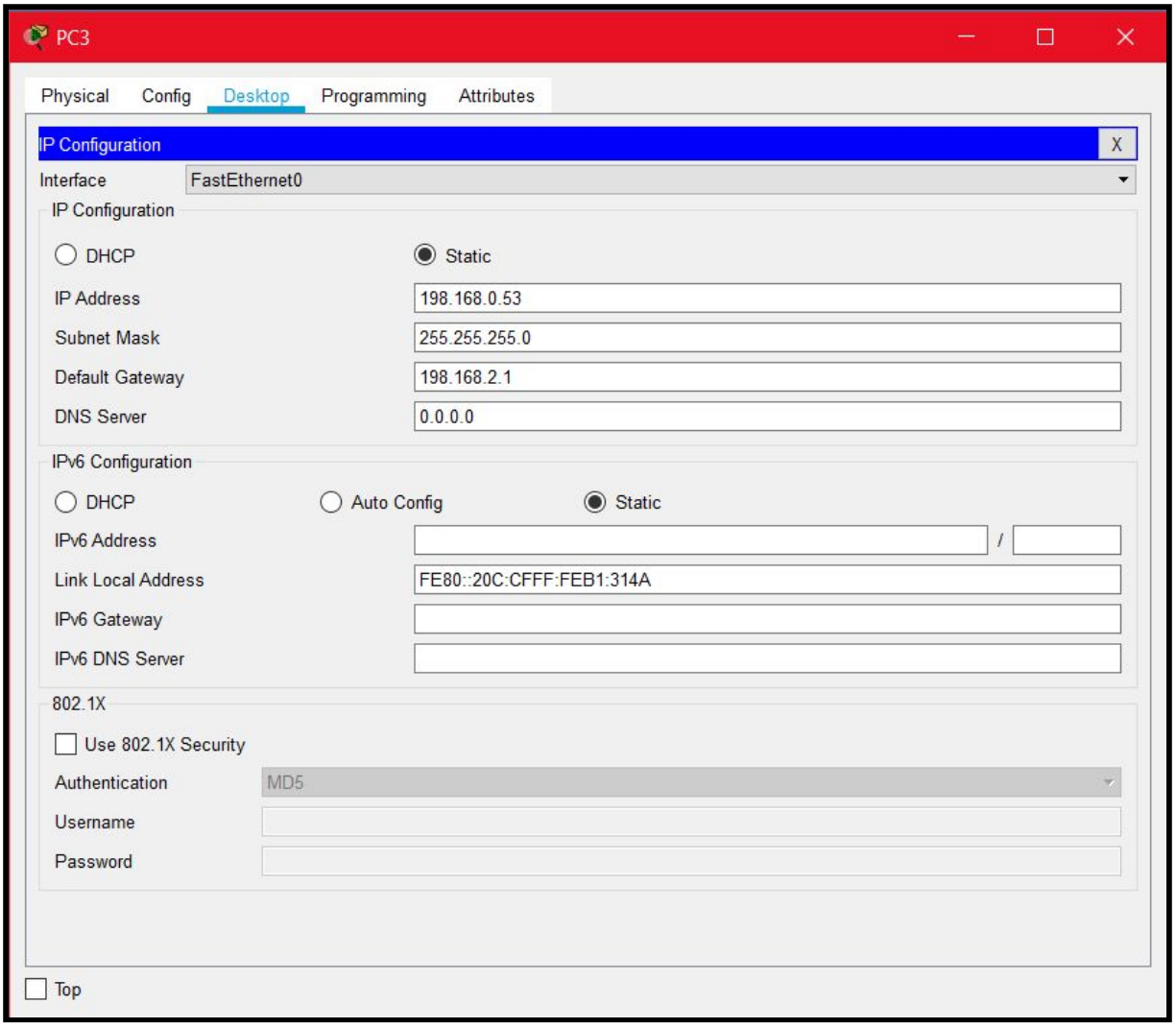
- PC 1 [IP: 198.168.0.**51**]



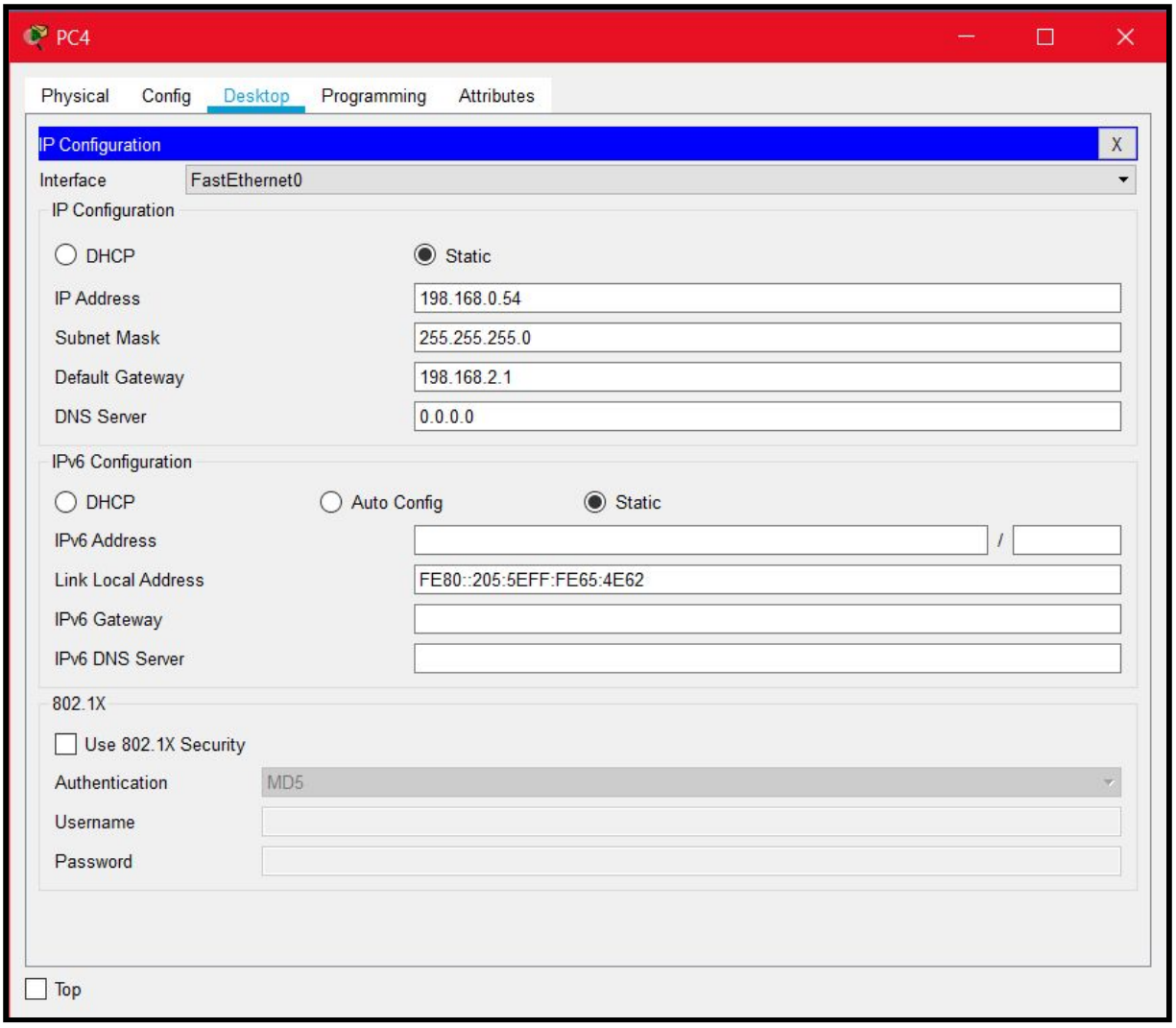
- PC 2 [IP: 198.168.0.**52**]



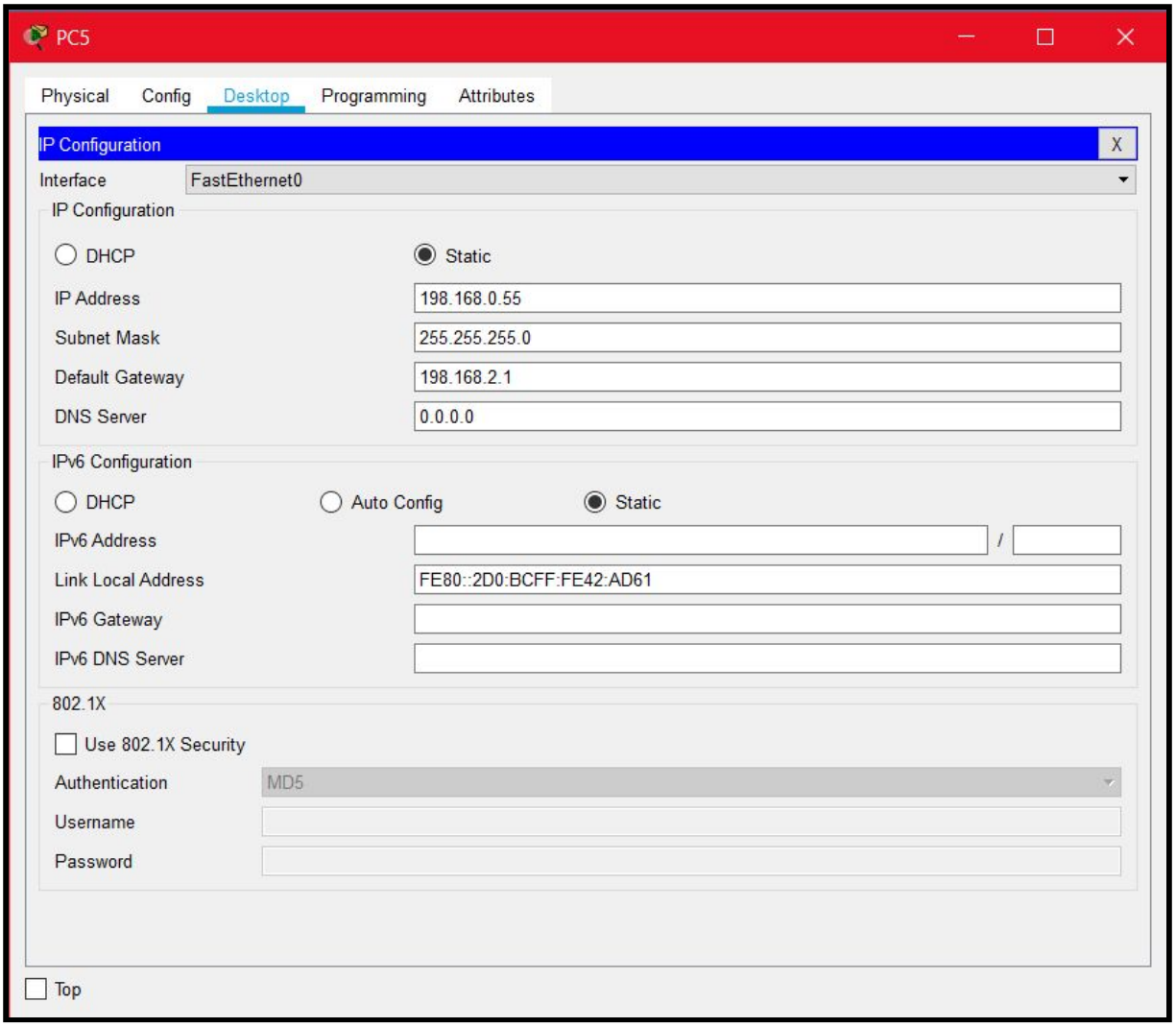
- PC 3 [IP: 198.168.0.**53**]



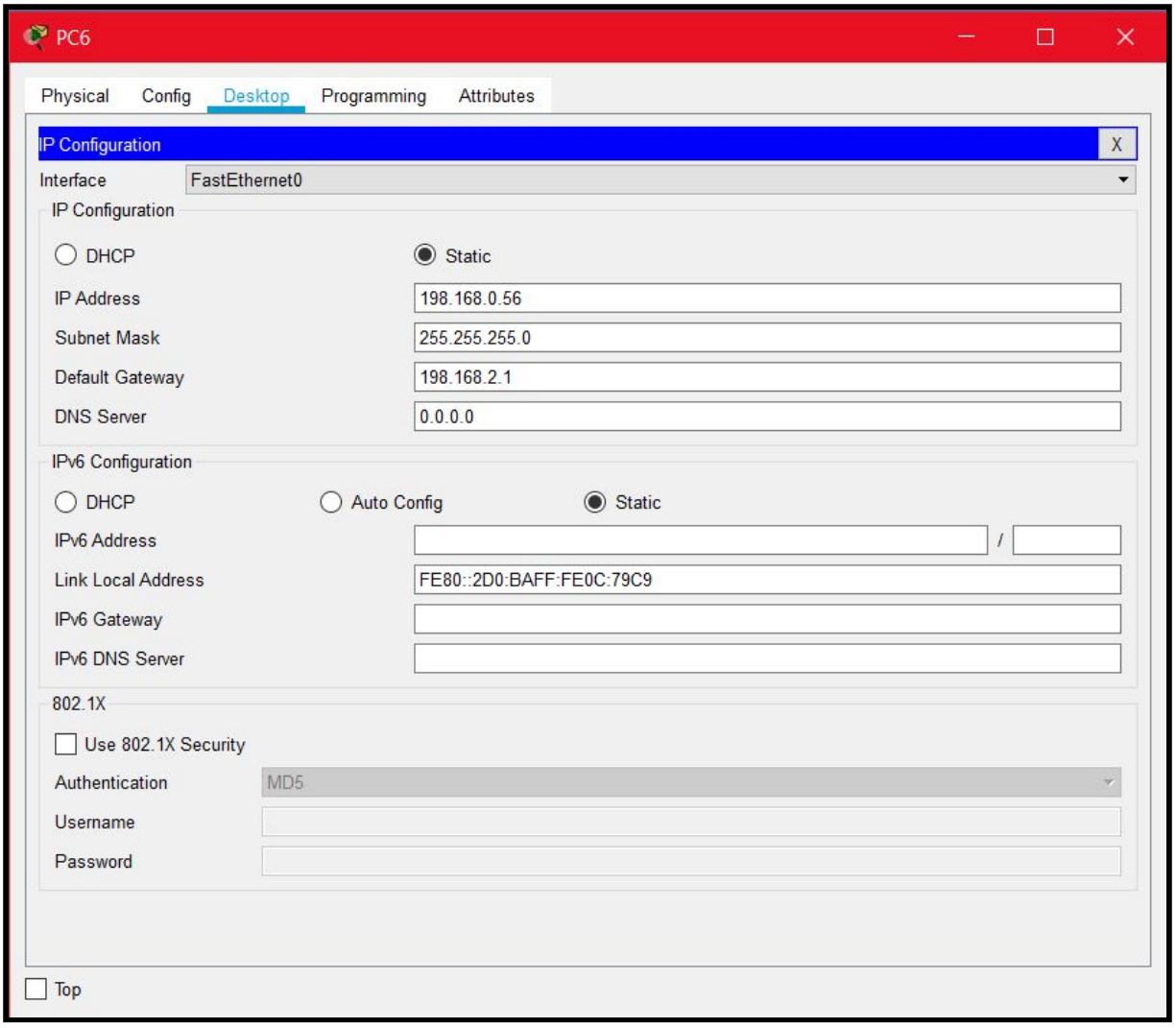
- PC 4 [IP: 198.168.0.**54**]



- PC 5 [IP: 198.168.0.**55**]



- PC 6 [IP: 198.168.0.**56**]



Conclusion:

We can use Cisco Packet Tracer to design and simulate topologies.