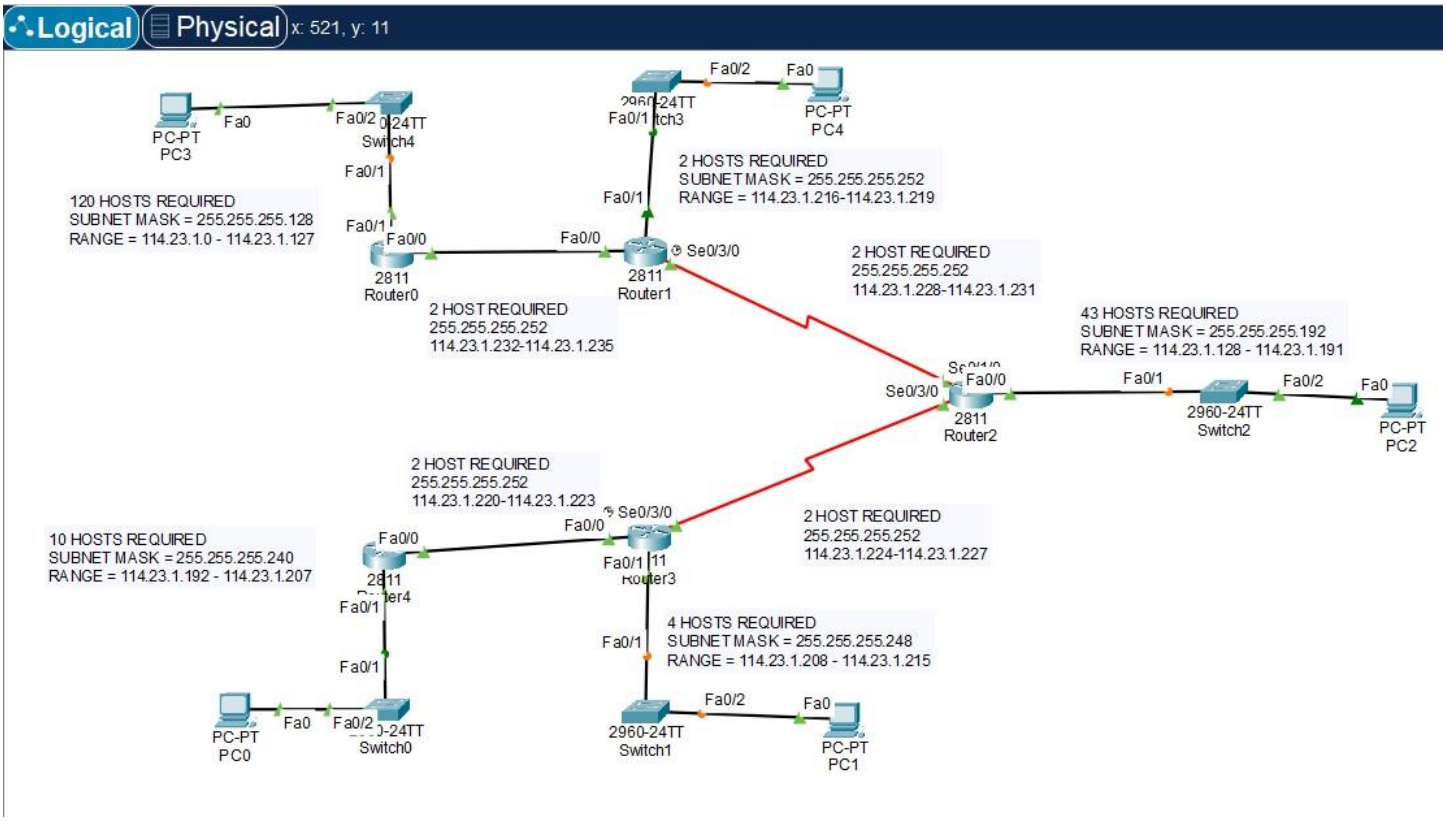
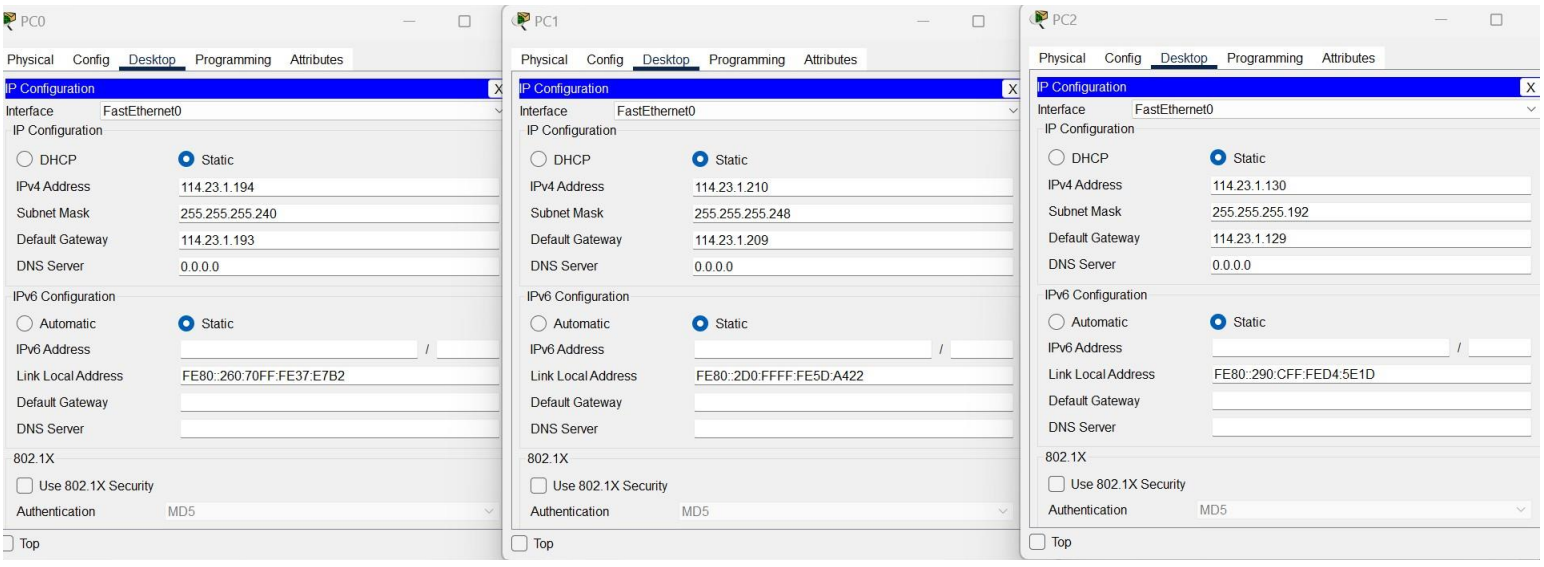
TASK 5

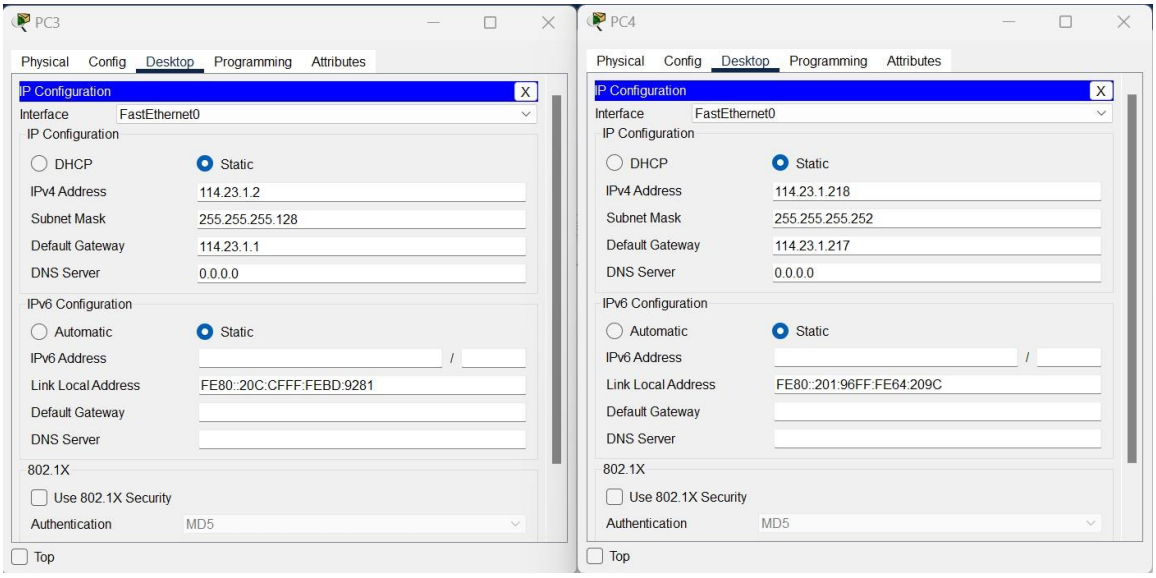
Submitted by: YOUAIL JOHN (EL-19038)

Designing the Topology: The topology was designed according to the given diagram but the number of hosts were reduced for simplicity.



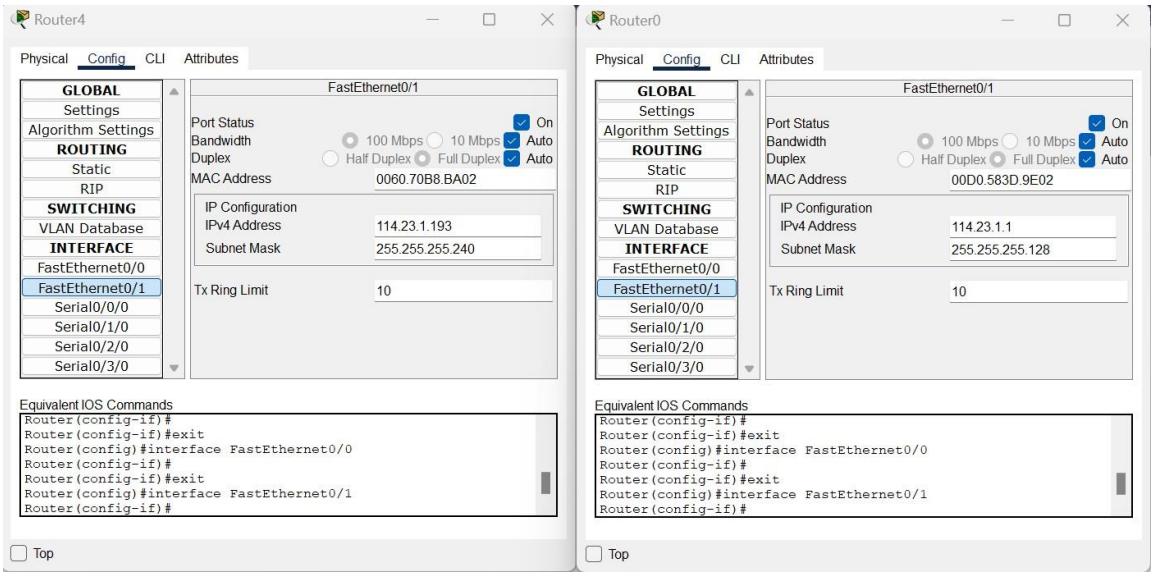
Setting up PCs: IPv4 adresses and default gateways are assigned according to the valid hosts adresses taken from the table. Subnet Mask is 255.255.0.0



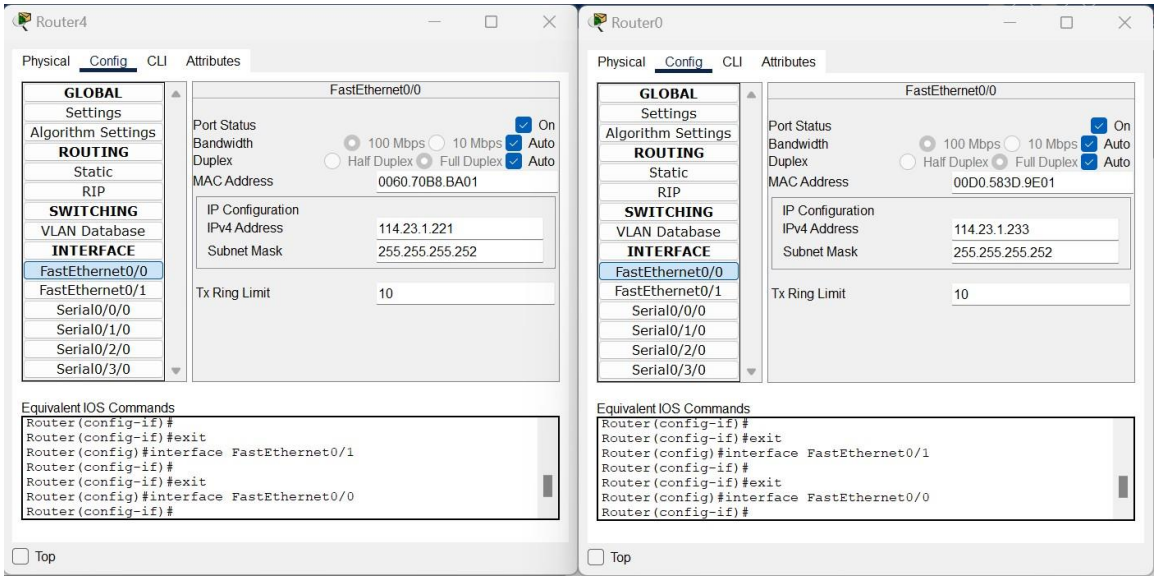


Setting up Routers: Connecting the switches to router and setting up all the routers.

Firstly, the Router 0 and Router 4 are connected to PC.

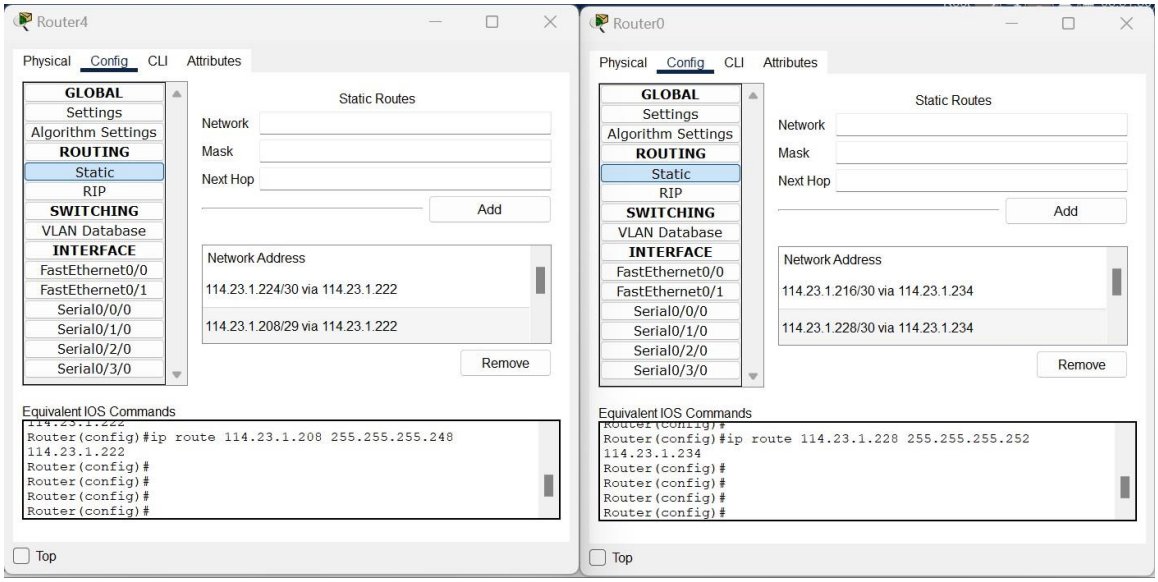


Secondly, the setup of the FastEthernet connection of Router0 with Router1 and Router4 with Router3.



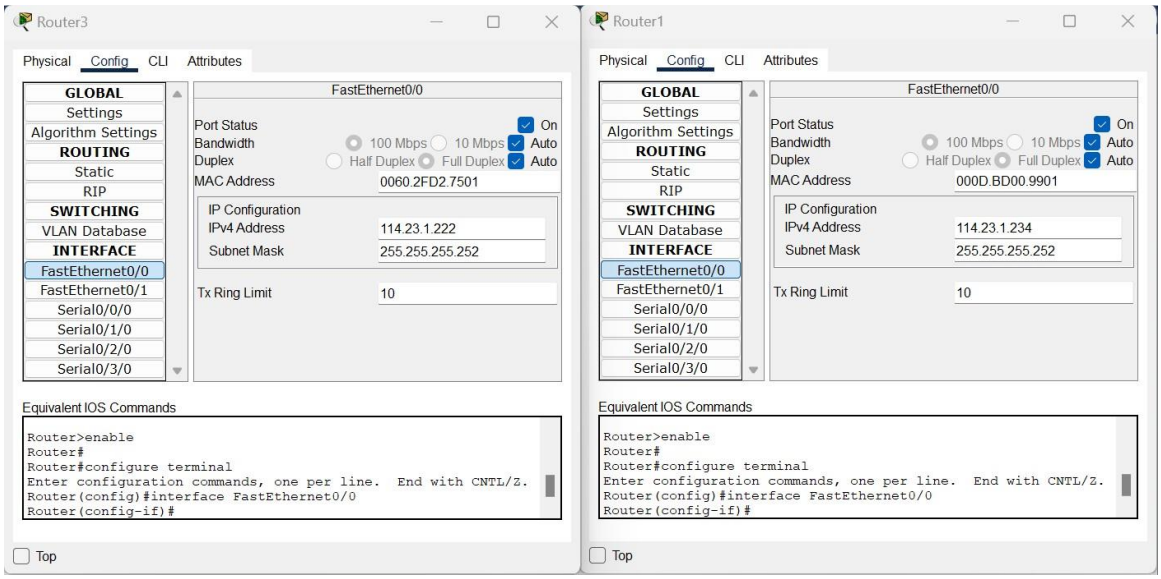
Lastly setting up static routing so routers can communicate with each other

Confguring Static routing so routers can communicate via serial port.

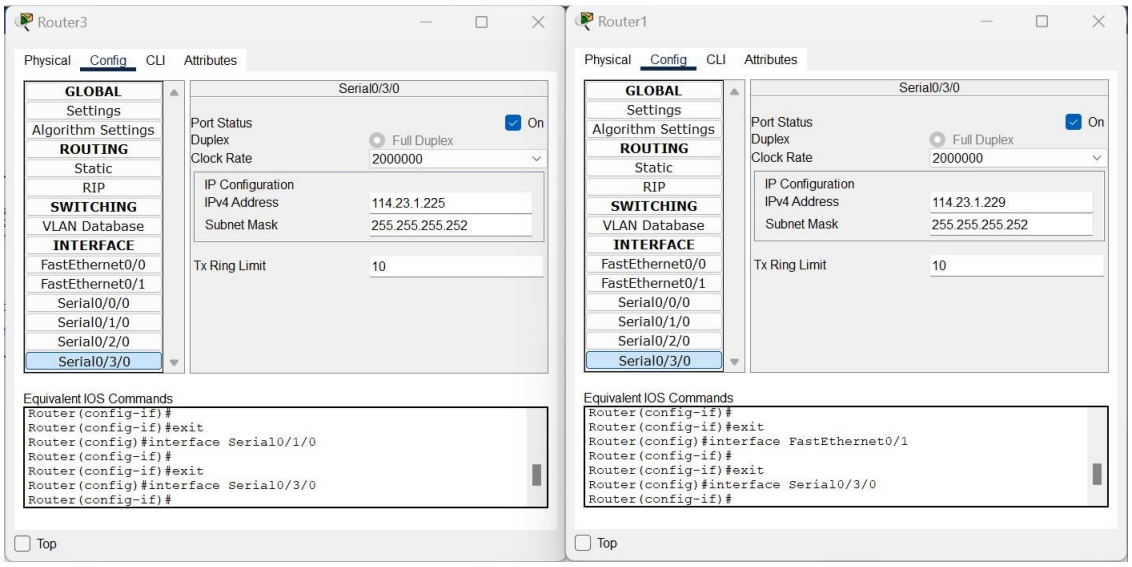


Now we setup Router1 and Router3

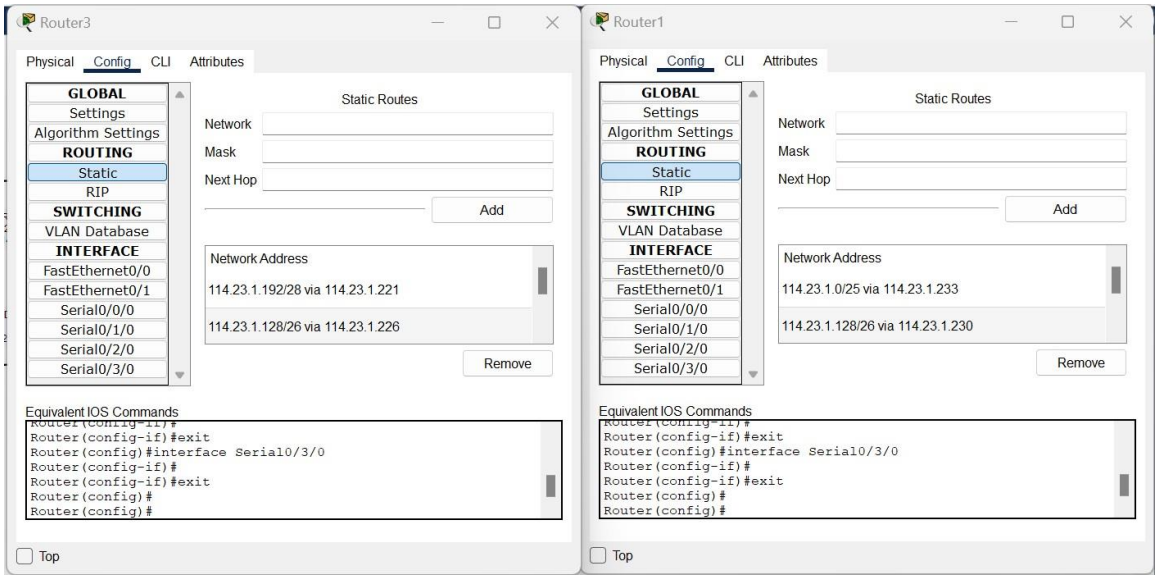
Firstly, setting up the PC connection with routers.



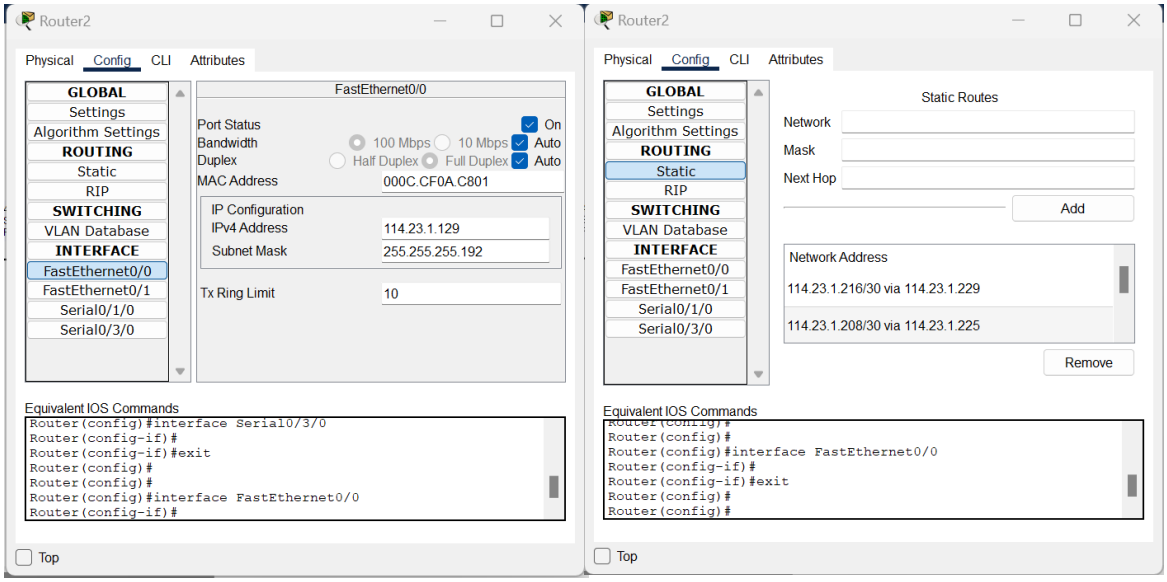
Then setting up the connections with Router0 and Router4 with Router1 and Router3 respectively.



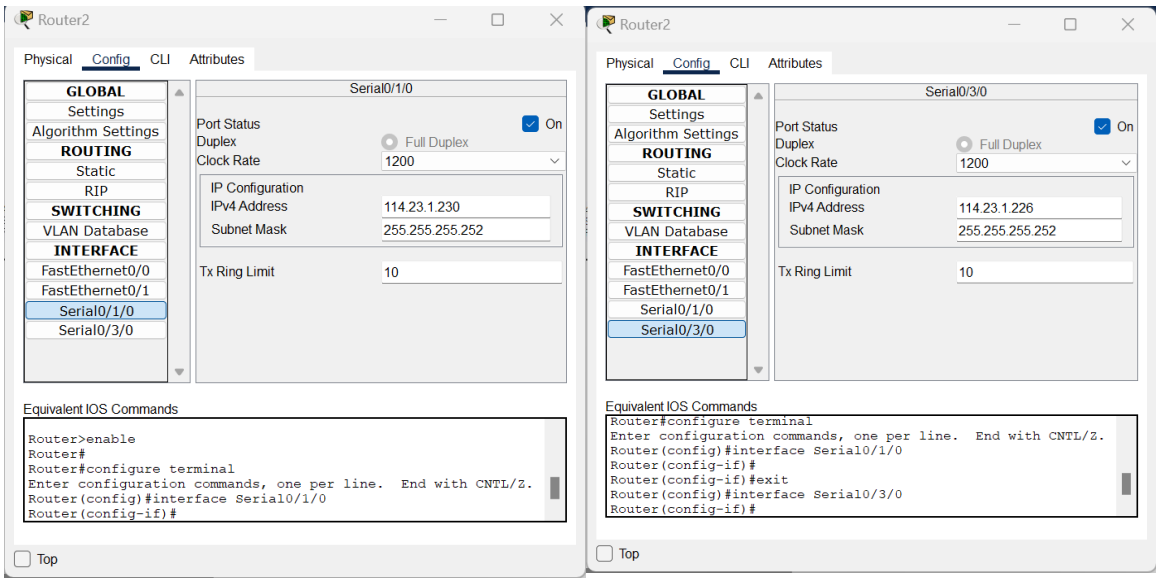
Static routing the routers



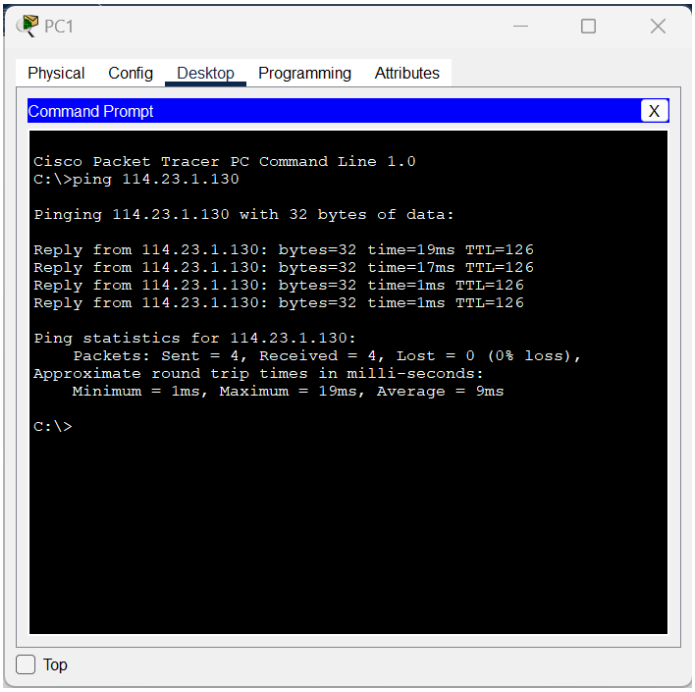
FastEtherent connection to PCs for Router2and static routing Router2



Serial connection of Router2 to Router1 and Router3



Pinging: Verifying connections by pinging PC1 (IPv4= 114.23.1.210) to PC13 (IPv4= 114.23.1.130) which is successful.



More tests with successful packet transfers

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