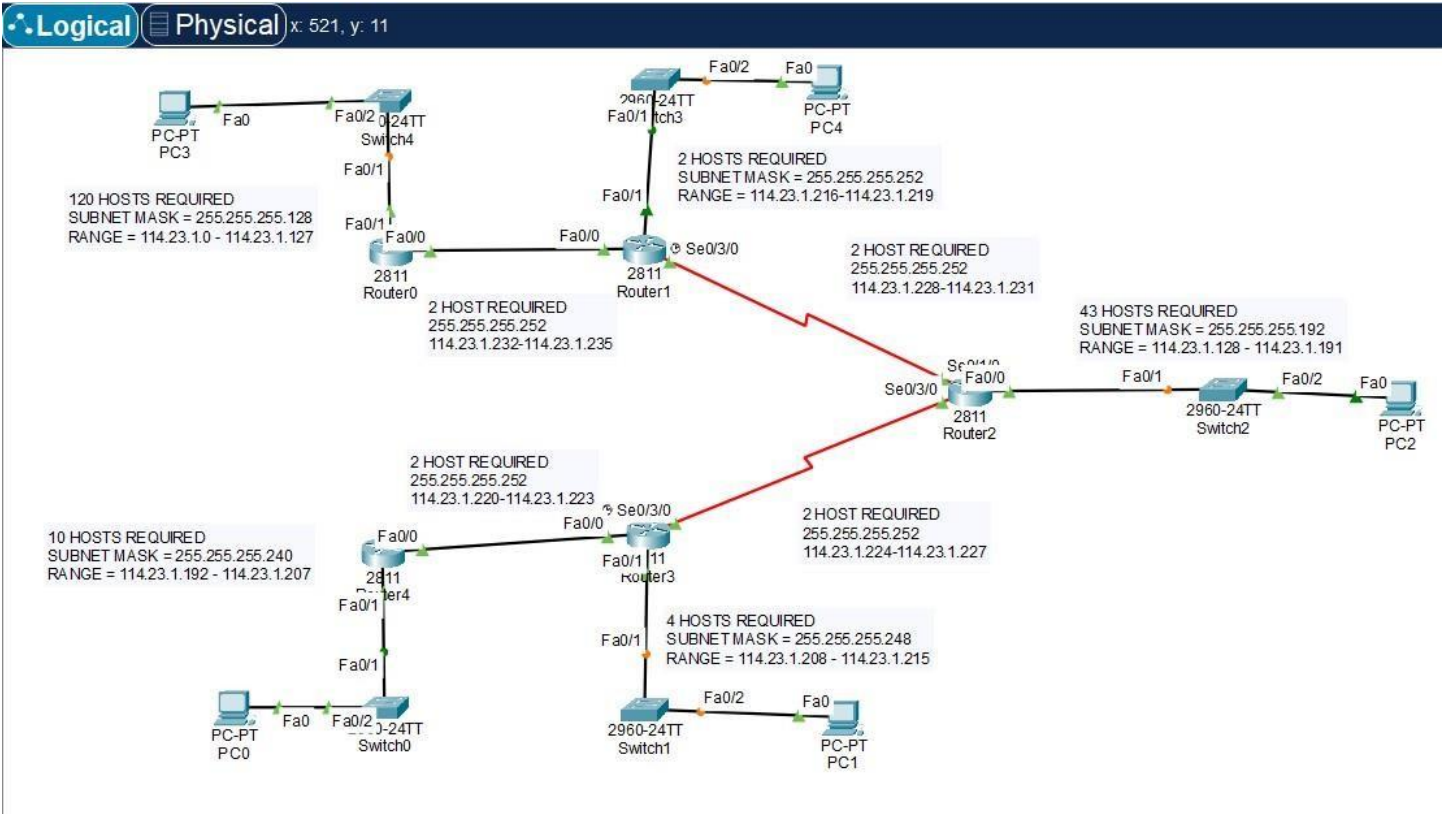


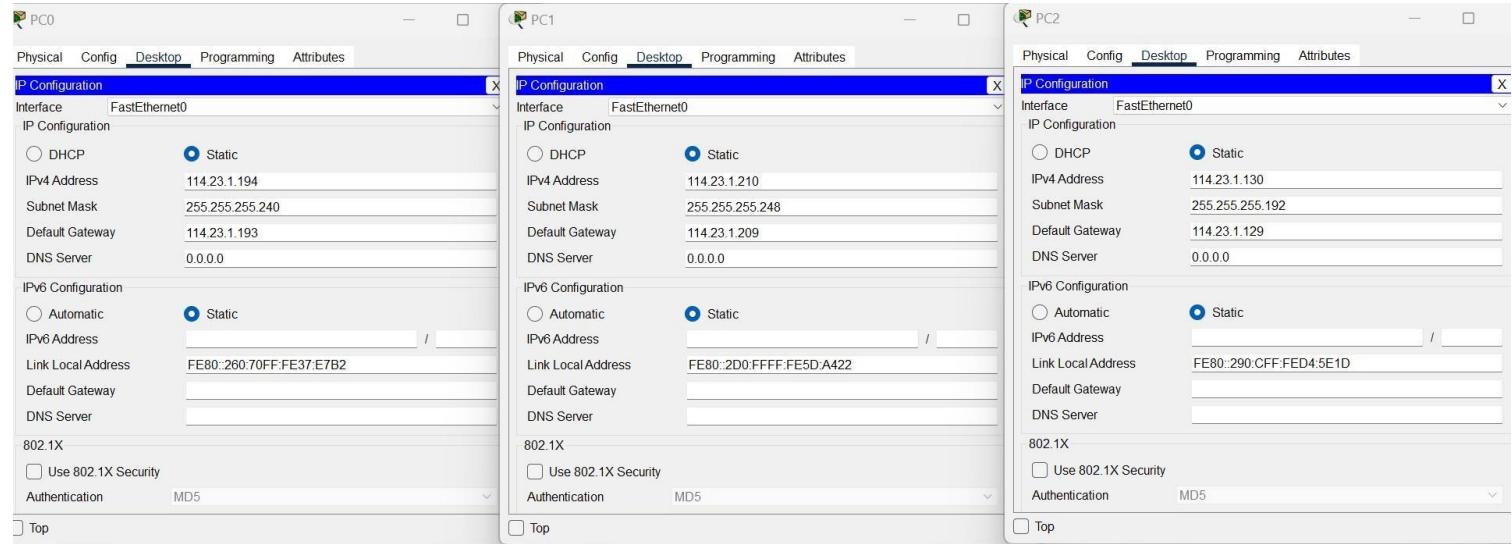
### Task 5:

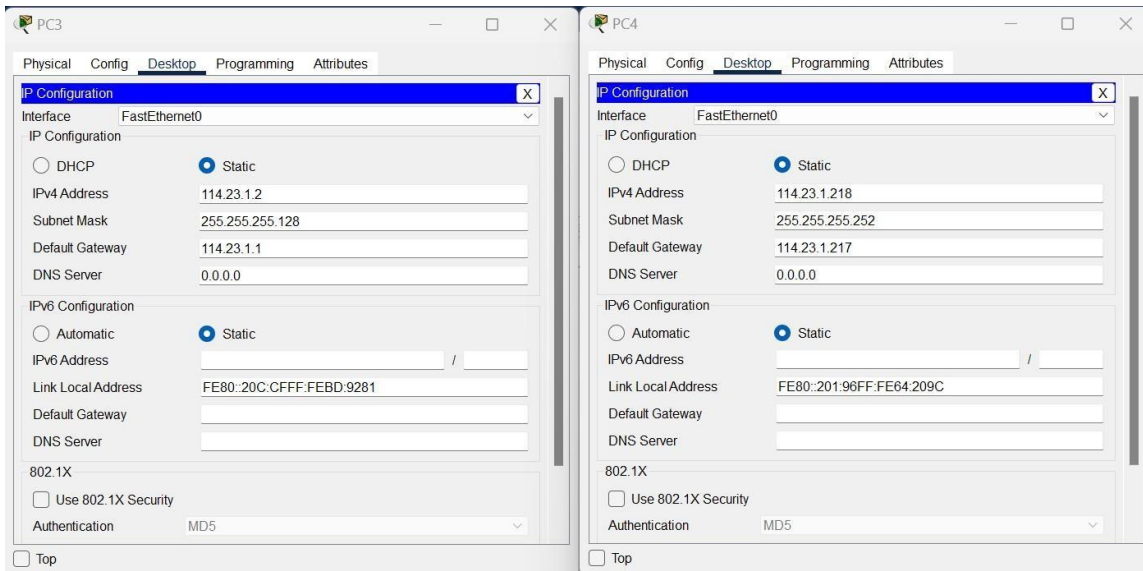
Design on packet tracer the network from document labelled **VLSM**.

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

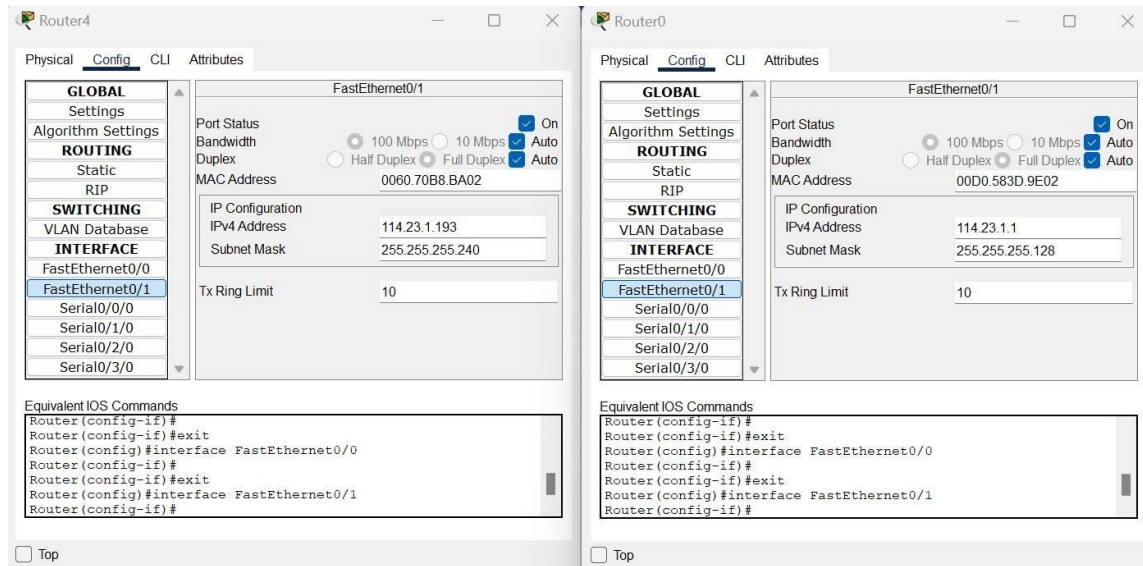


**Setting up PCs:** IPv4 addresses and default gateways are assigned according to the valid hosts addresses taken from the table. Subnet Mask is 255.255.0.0

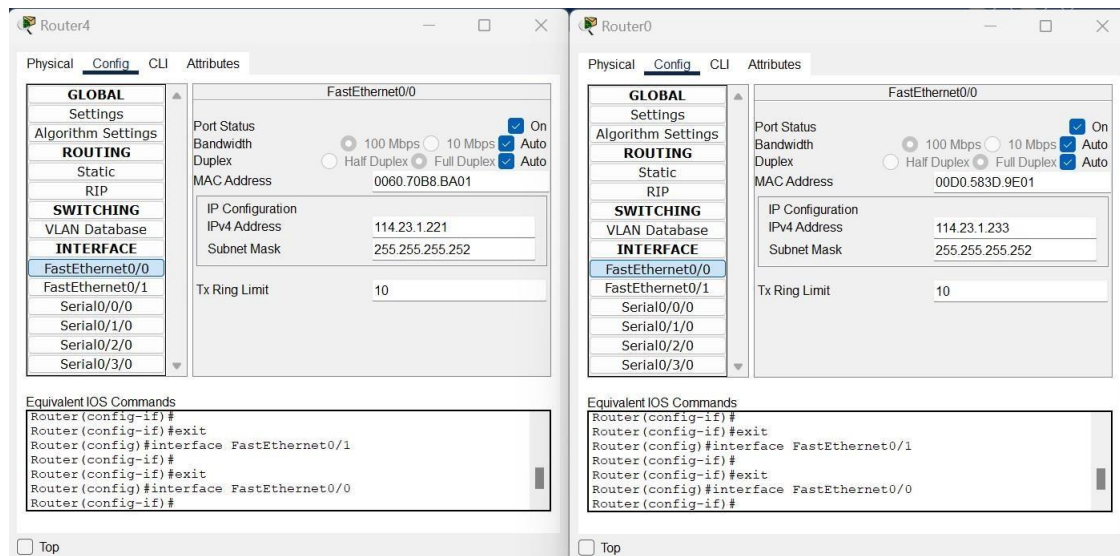




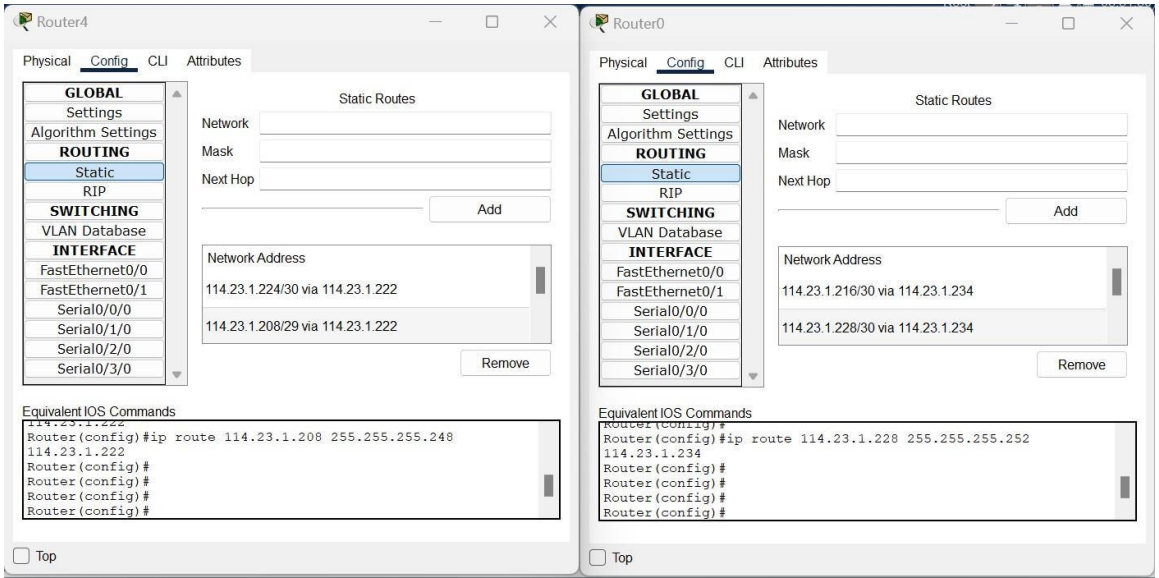
**Setting up Routers:** Connecting the switches to router and setting up all the routers. Firstly, the Router 0 and Router 4 are connected to PC.



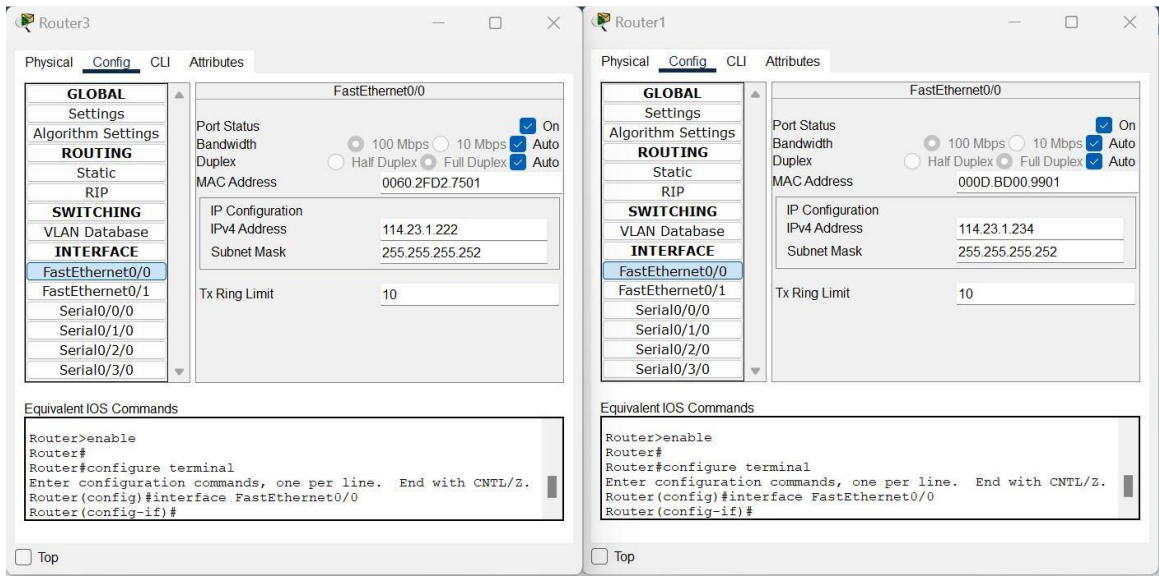
Secondly, the setup of the FastEthernet connection of Router0 with Router1 and Router4 with Router3.



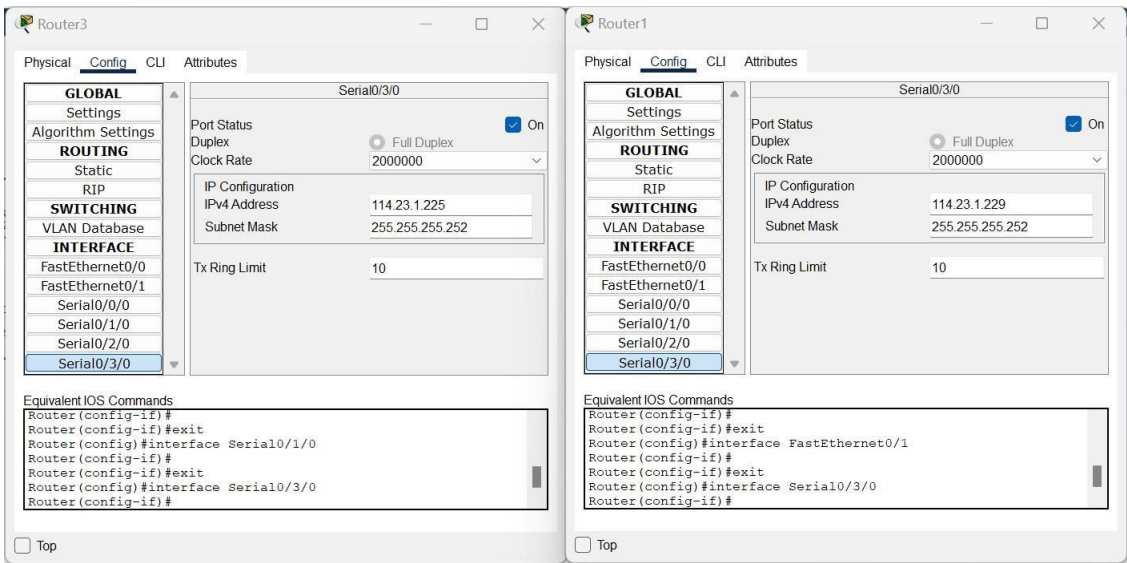
Lastly setting up static routing so routers can communicate with each other  
Configuring Static routing so routers can communicate via serial port.



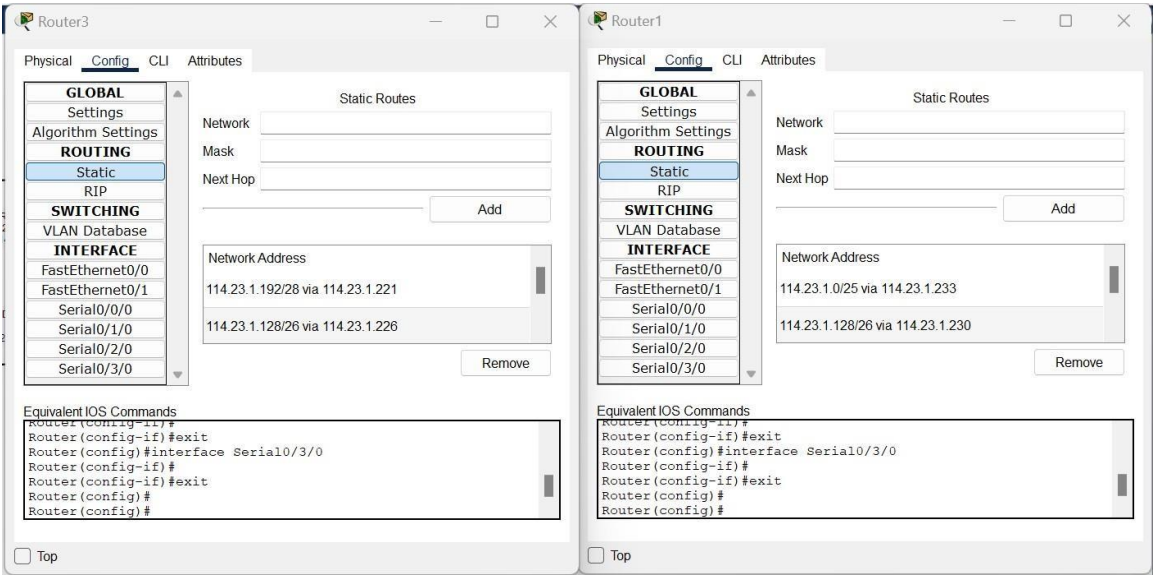
Now we setup Router1 and Router3  
Firstly, setting up the PC connection with routers.



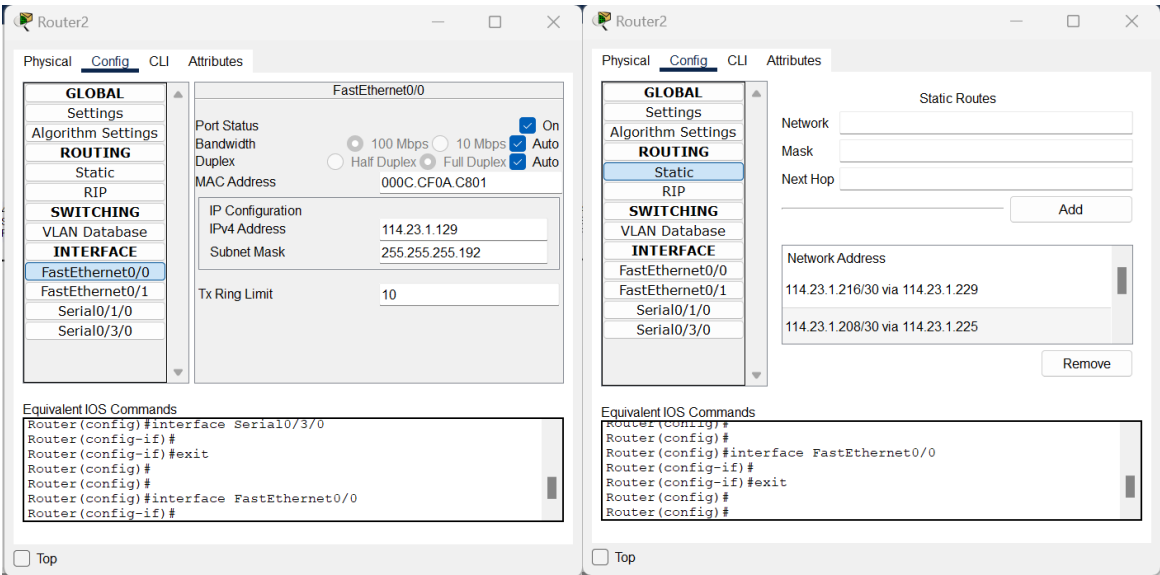
Then setting up the connections with Router0 and Router4 with Router1 and Router3 respectively.



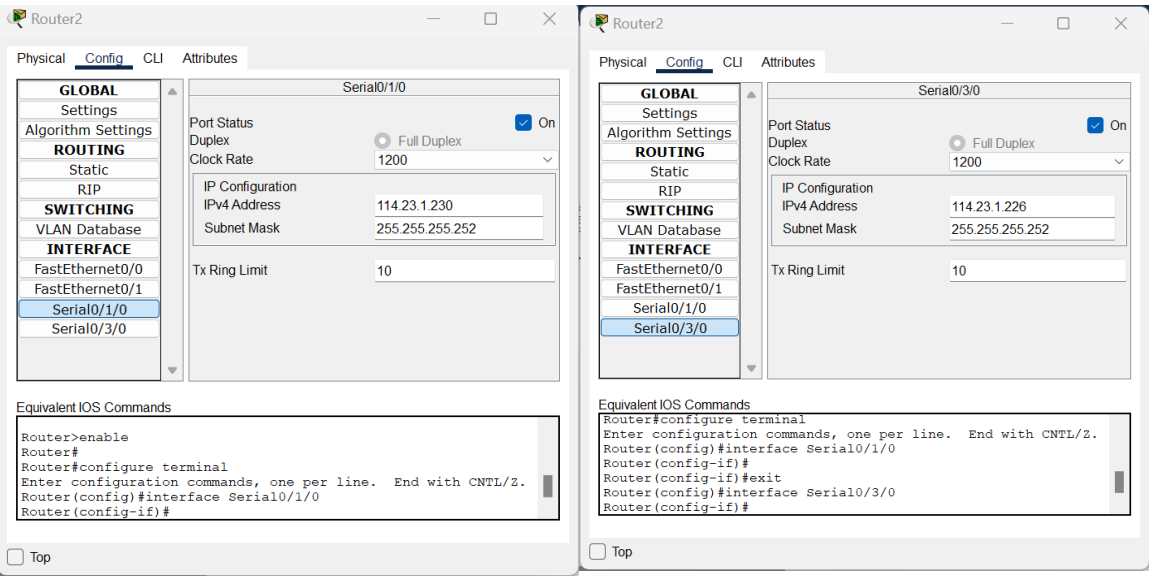
Static routing the routers



Fast Ethernet connection to PCs for Router2 and static routing Router2

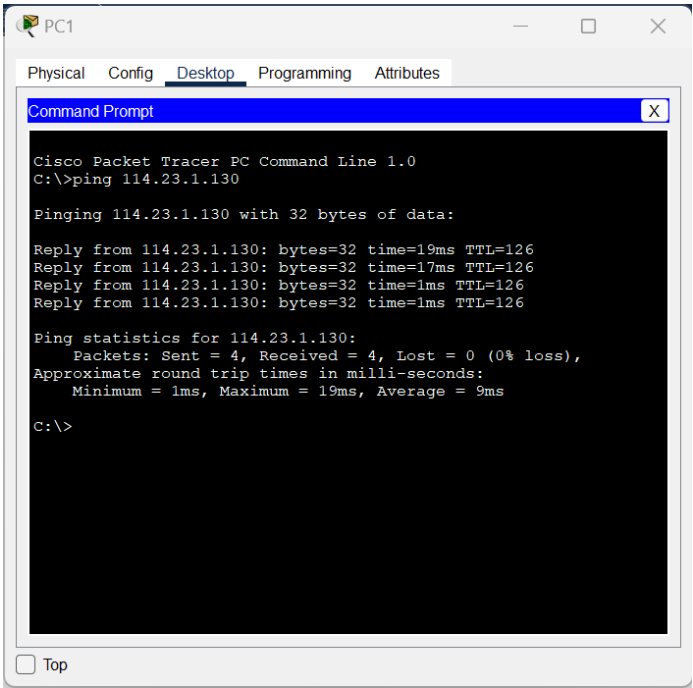


Serial connection of Router2 to Router1 and Router3





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



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)

