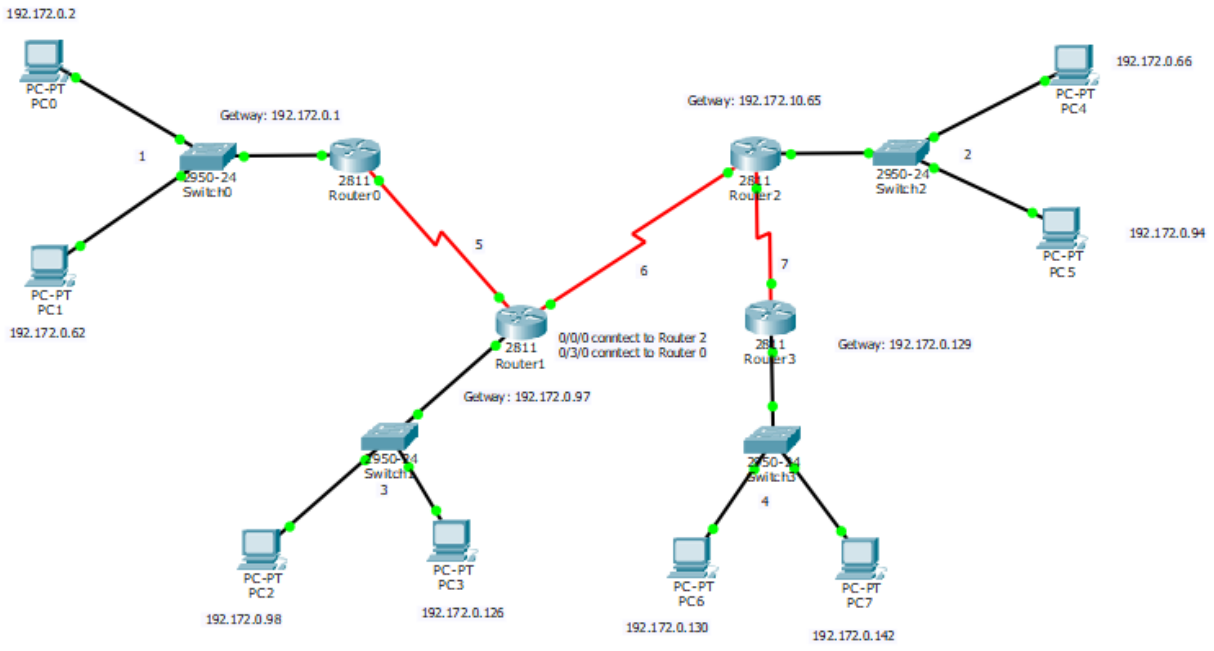
Project Name: VLSM (Variable Length Subnetting Mask) Implementation and Create a Network Using VLSM from 192.172.0.0/24 IP Address.

VLSM Table

Network No	Network Address	1st Usable Address	2nd Usable Address	Last Usable Address	Broadcast Address	Subnet Mask
1	192.172.0.0/26	192.172.0.1	192.172.0.2	192.172.0.62	192.172.0.63	255.255.255.192
2	192.172.0.64/26	192.172.0.65	192.172.0.66	192.172.0.94	192.172.0.95	255.255.255.224
3	192.172.0.96/26	192.172.0.97	192.172.0.98	192.172.0.126	192.172.0.127	255.255.255.224
4	192.172.0.128/26	192.172.0.129	192.172.0.130	192.172.0.142	192.172.0.143	255.255.255.240
5	192.172.0.144/26	192.172.0.145	192.172.0.146	192.172.0.146	192.172.0.147	255.255.255.252
6	192.172.0.148/26	192.172.0.149	192.172.0.150	192.172.0.150	192.172.0.151	255.255.255.252
7	192.172.0.152/26	192.172.0.153	192.172.0.154	192.172.0.154	192.172.0.155	255.255.255.252

Connection Diagram of Network



PC Configuration

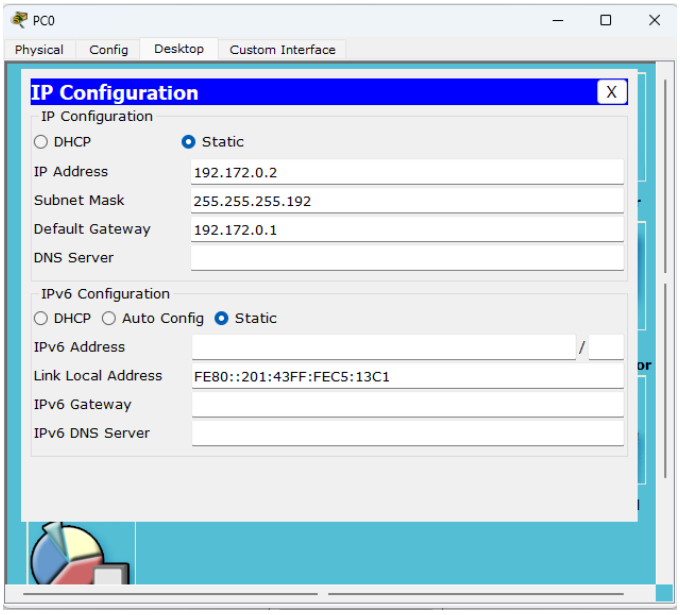


Fig. IP Configuration for PC0

Router Configuration

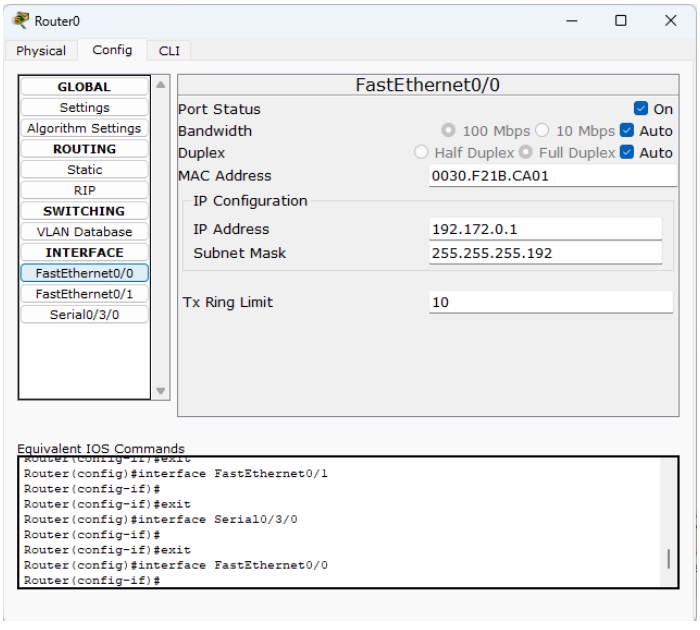


Fig. Router Configuration for Network 1

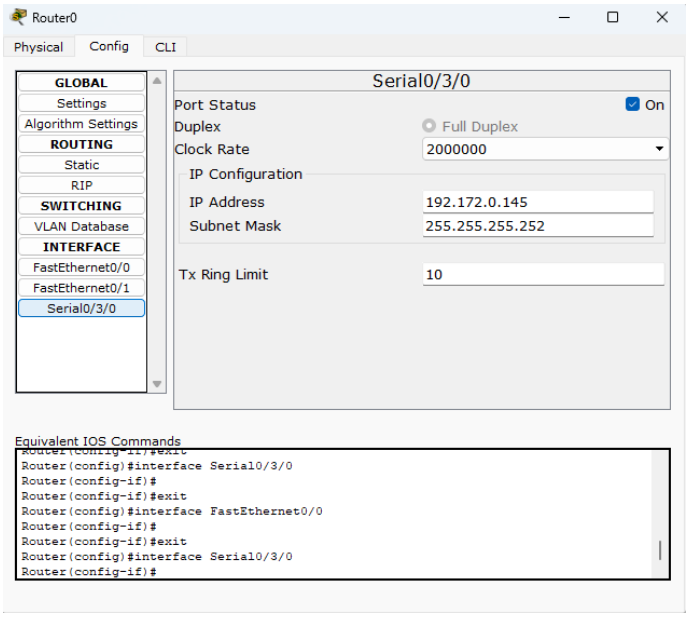


Fig. Router Configuration for Network 5

RIP Configuration

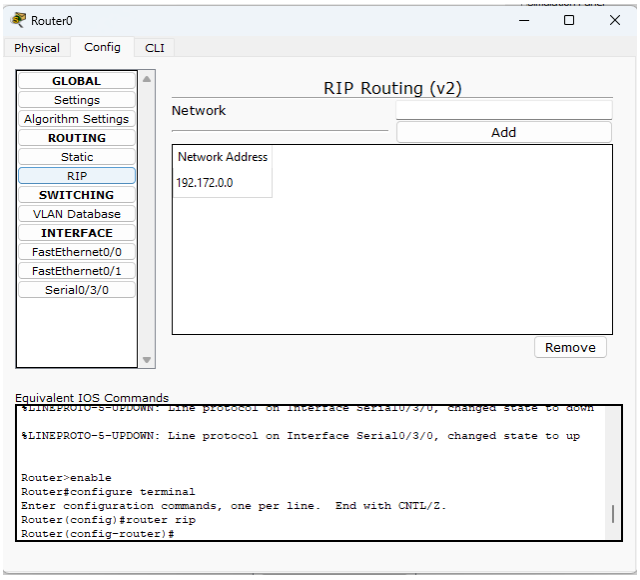


Fig. RIP Configuration for Router0

Verifying the network by pinging the IP address

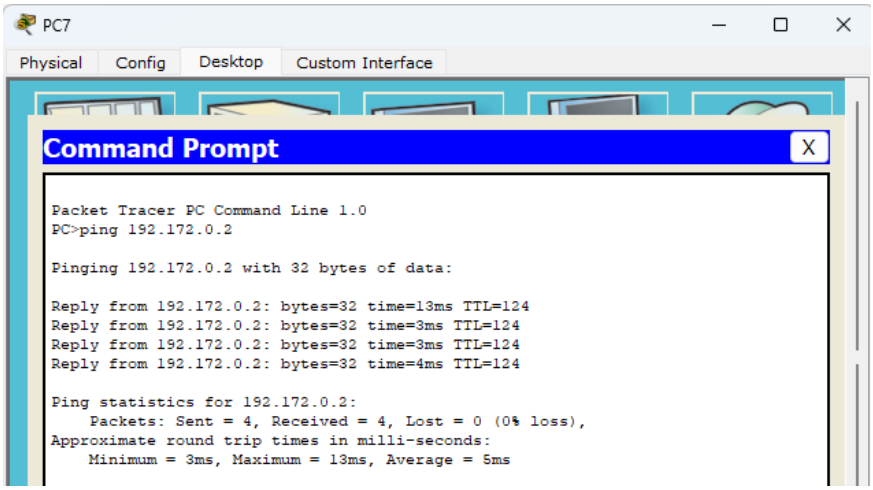


Fig. Ping between PC0 and PC7

Simulation Result