CISCO

IP SUBNETTING

BY
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Configure the Network as Follows

1.subnet 192.168.1.0/24 …. Subnet this into 4 subnet

2.subnet 1 for site 1

3.subnet 2 for the link between R1 and the internet router

4.subnet 3 for site 2

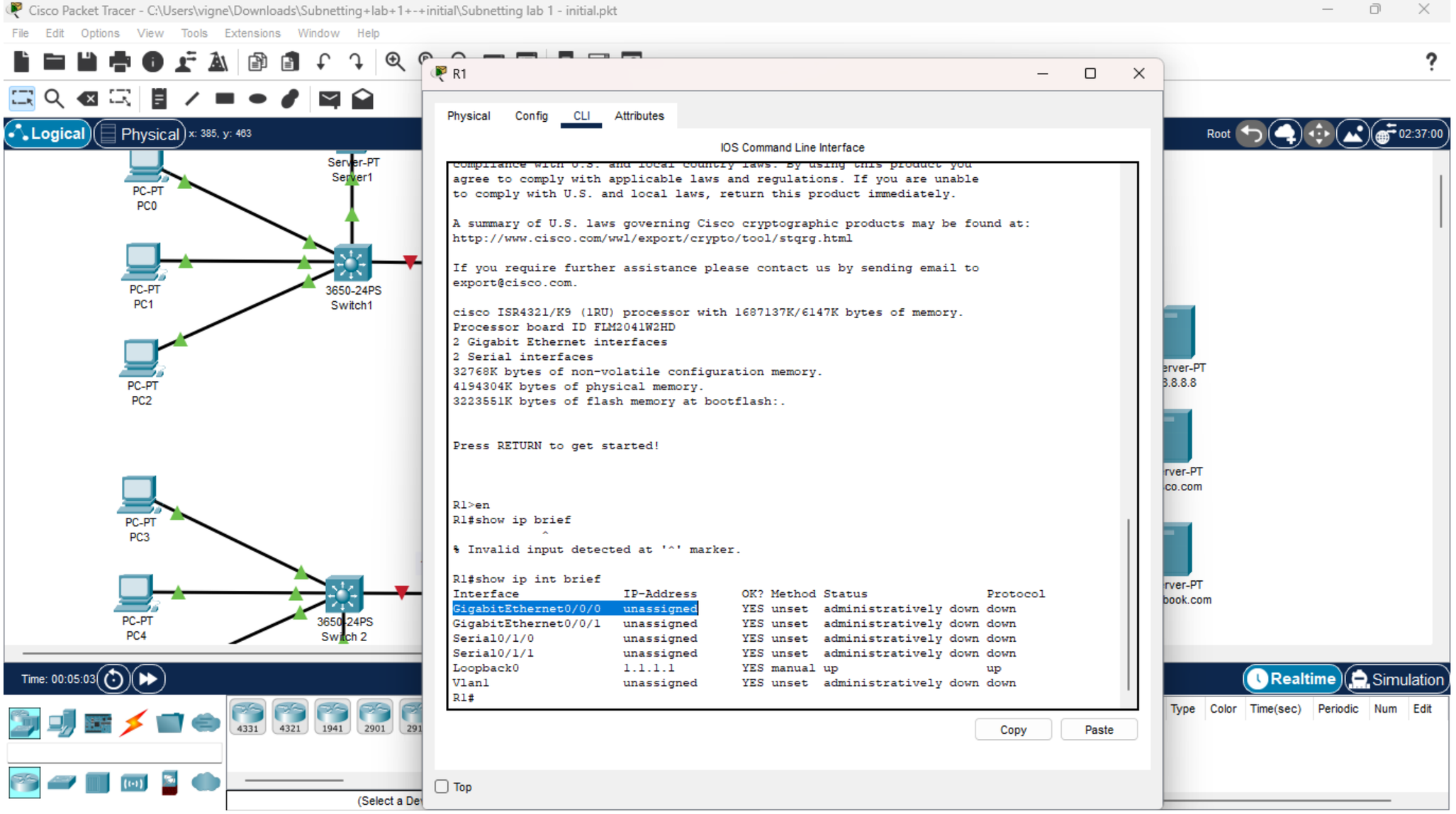
5.subnet 4 for the link between R2 and the internet router

6.configure the switches with the second last ip address in the subnet

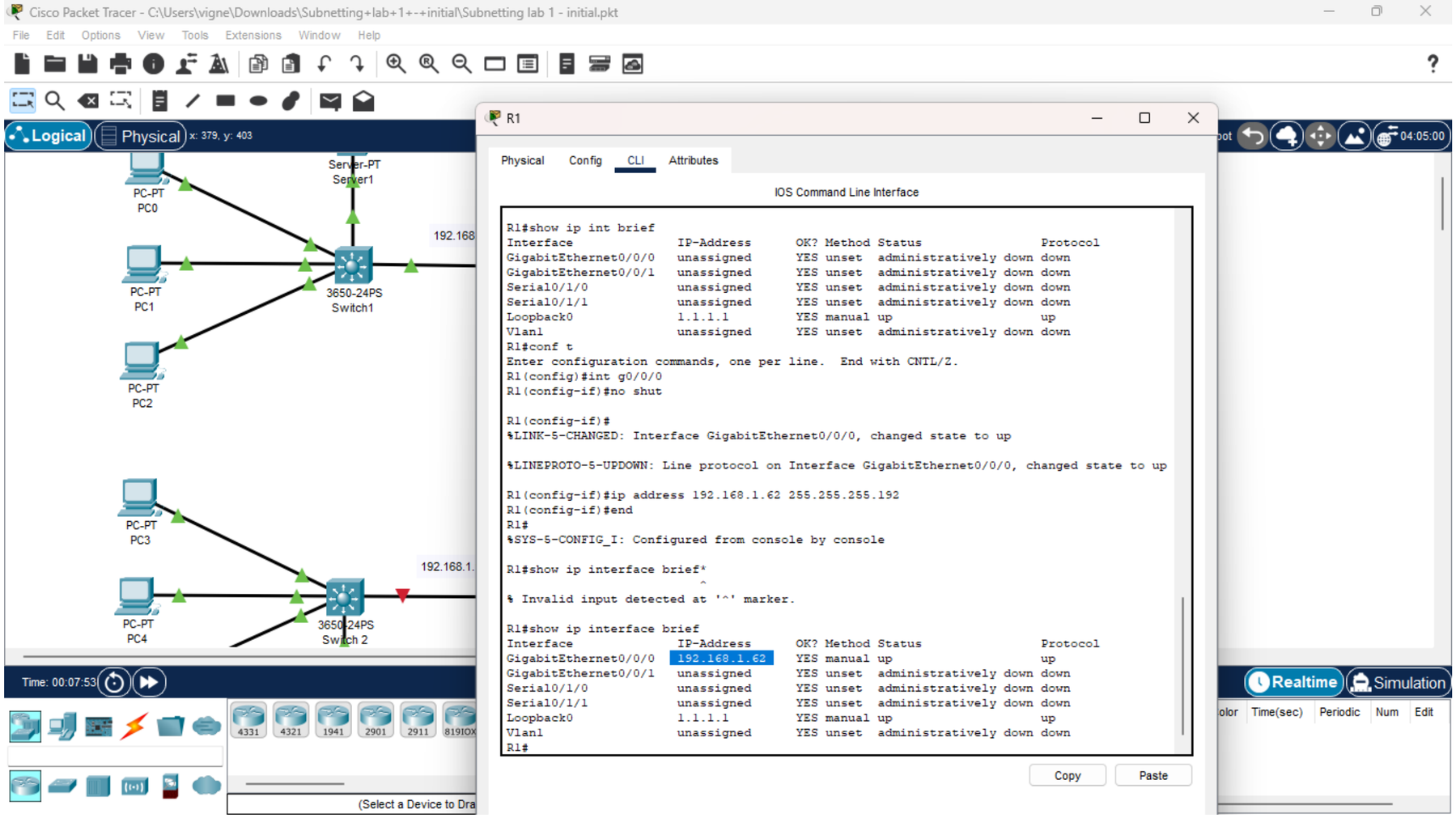
7.configure the DHCP servers with the third last ip address in the subnet

8.configure the DHCP server to allocate IP addresses to the clients

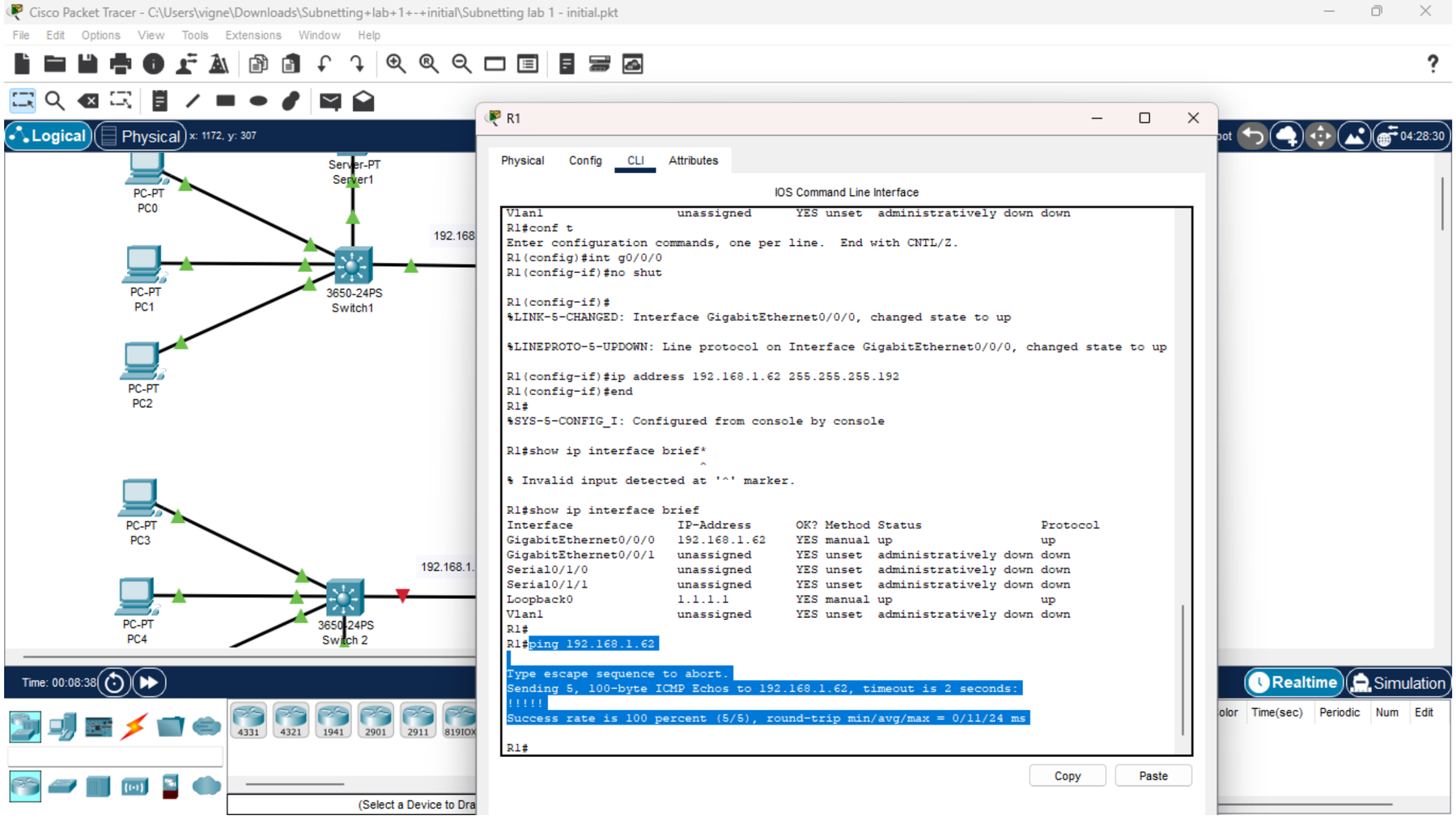
9. Verify the pc’s can access Cisco.com using the browser



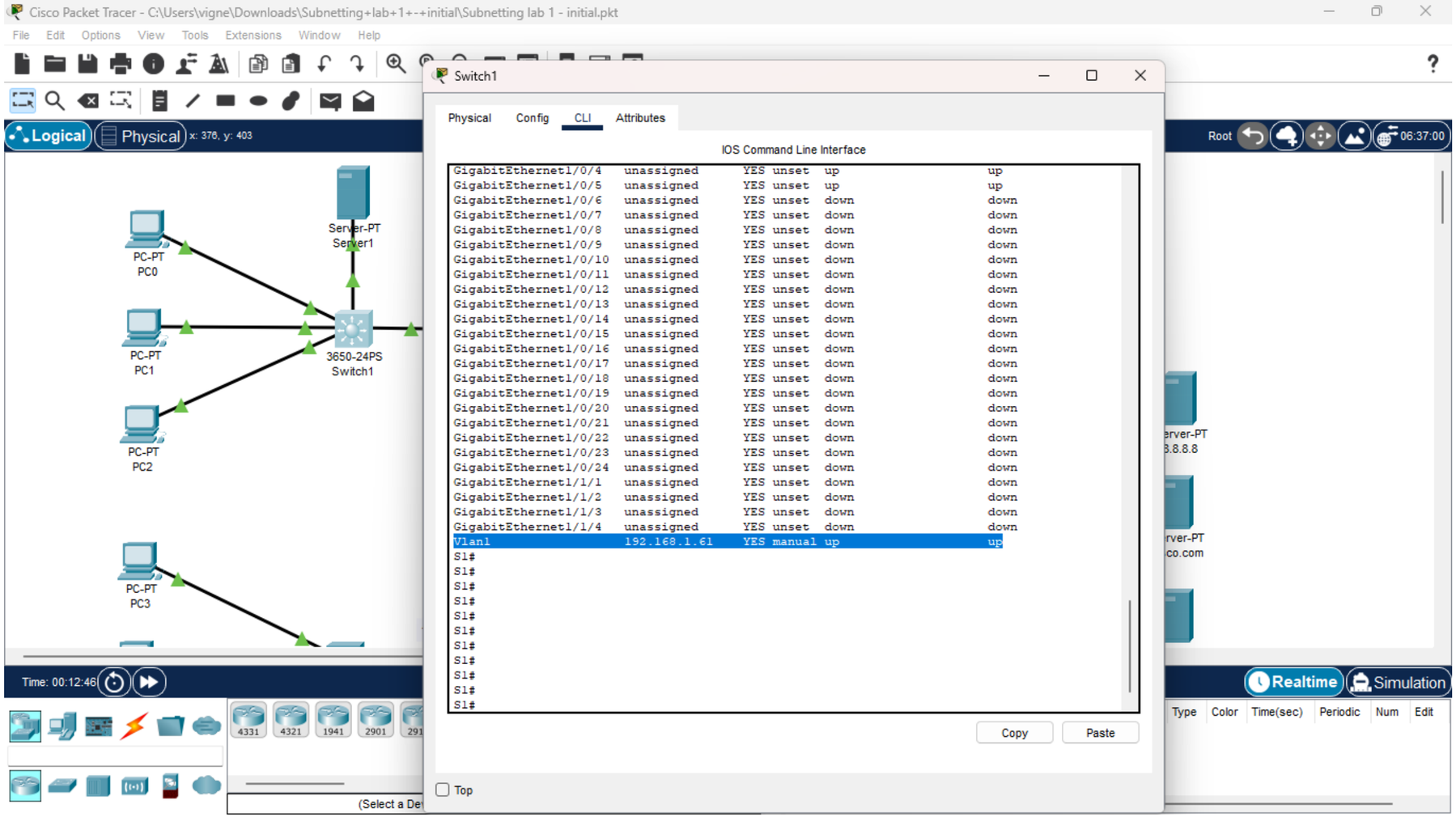
- configuring Router (R1) with the last ip address in the subnet
- gigabit 0/0/0 is not assigned , so assign the ip address.



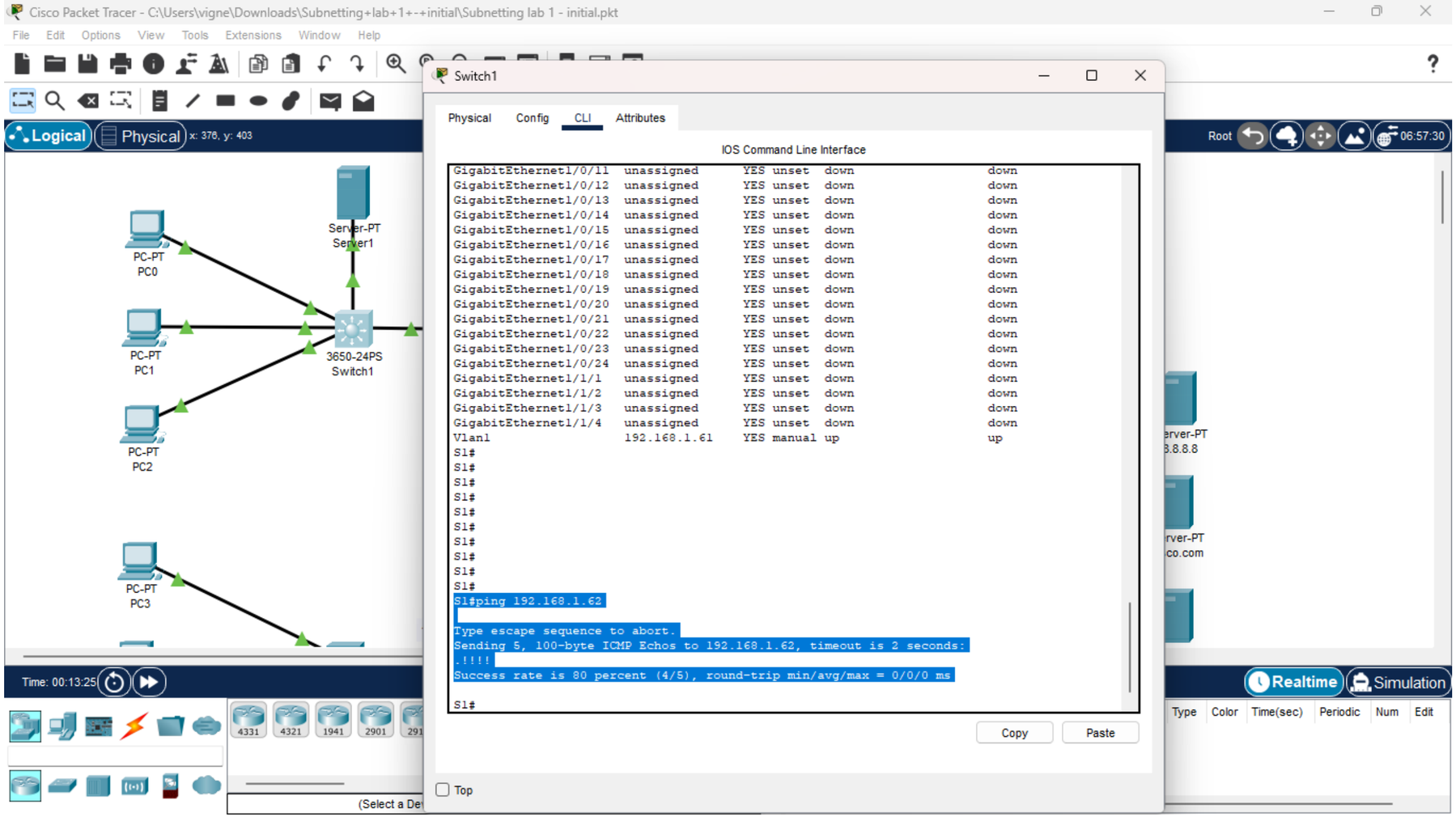
- gigabit 0/0/0 is assigned with the ip address 192.168.1.62 and the mask 255.255.255.192(last ip address in the subnet)
- Lets try to ping the local ip address



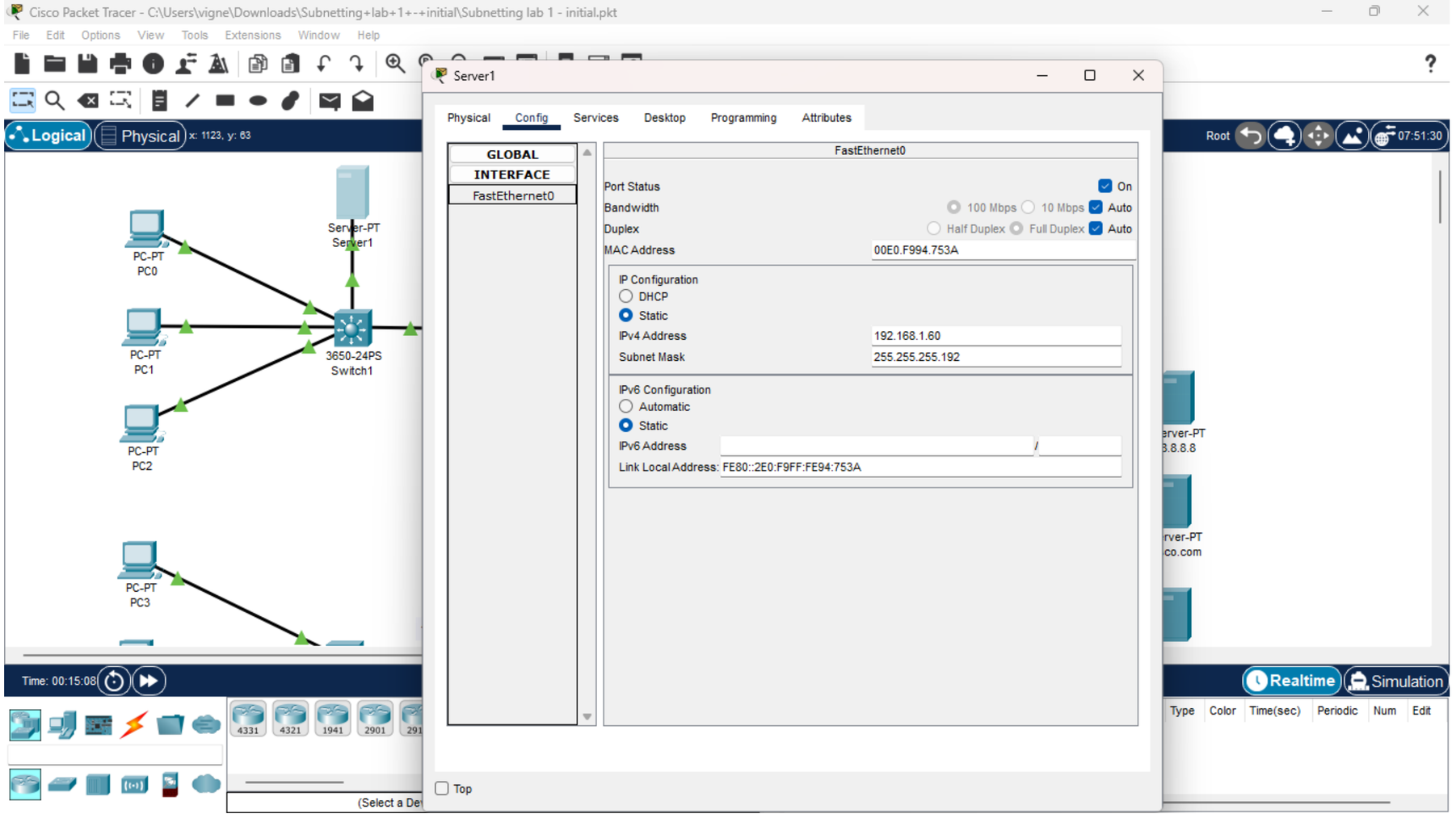
- Ping 192.168.1.62
- ping is successful



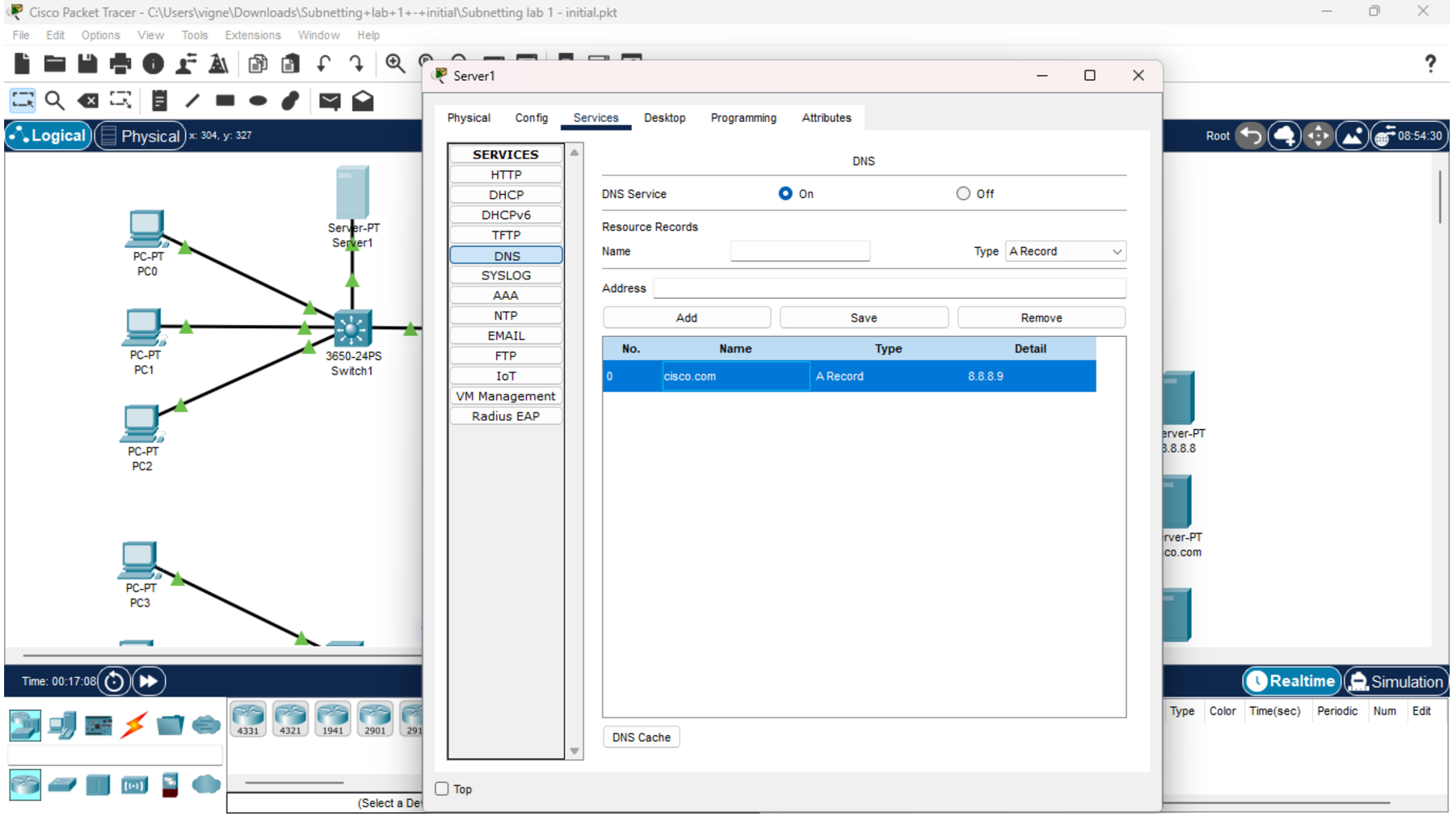
- Switch needs to be configured with the 2nd lastIp address in the subnet
- configure it with the ip address 192.168.1.61 with the subnet 255.255.255.192
- Ip address of the switch is successfully configured



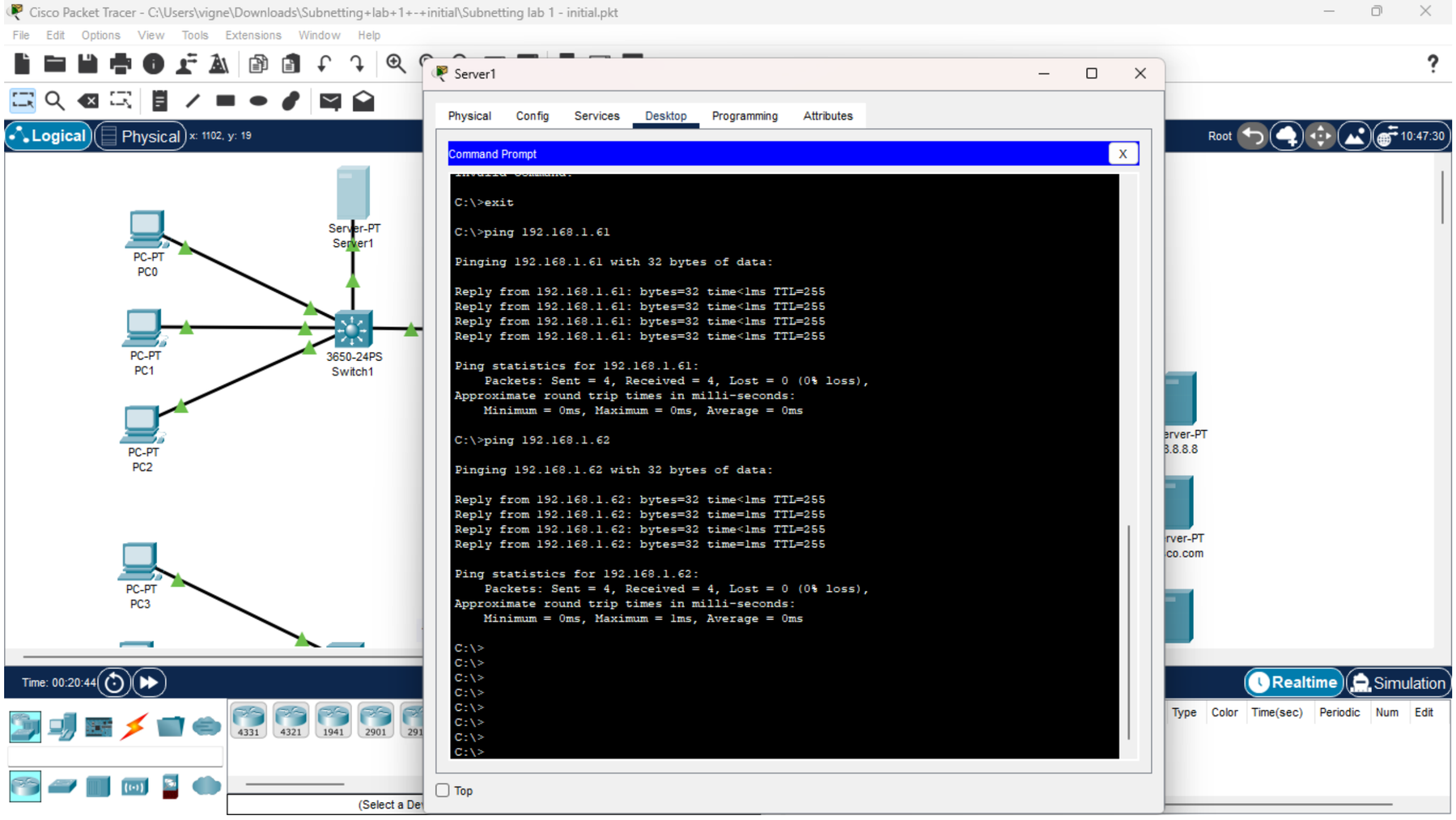
- Lets check the switch can ping the router
- yes it can .. switch successfully pings the router



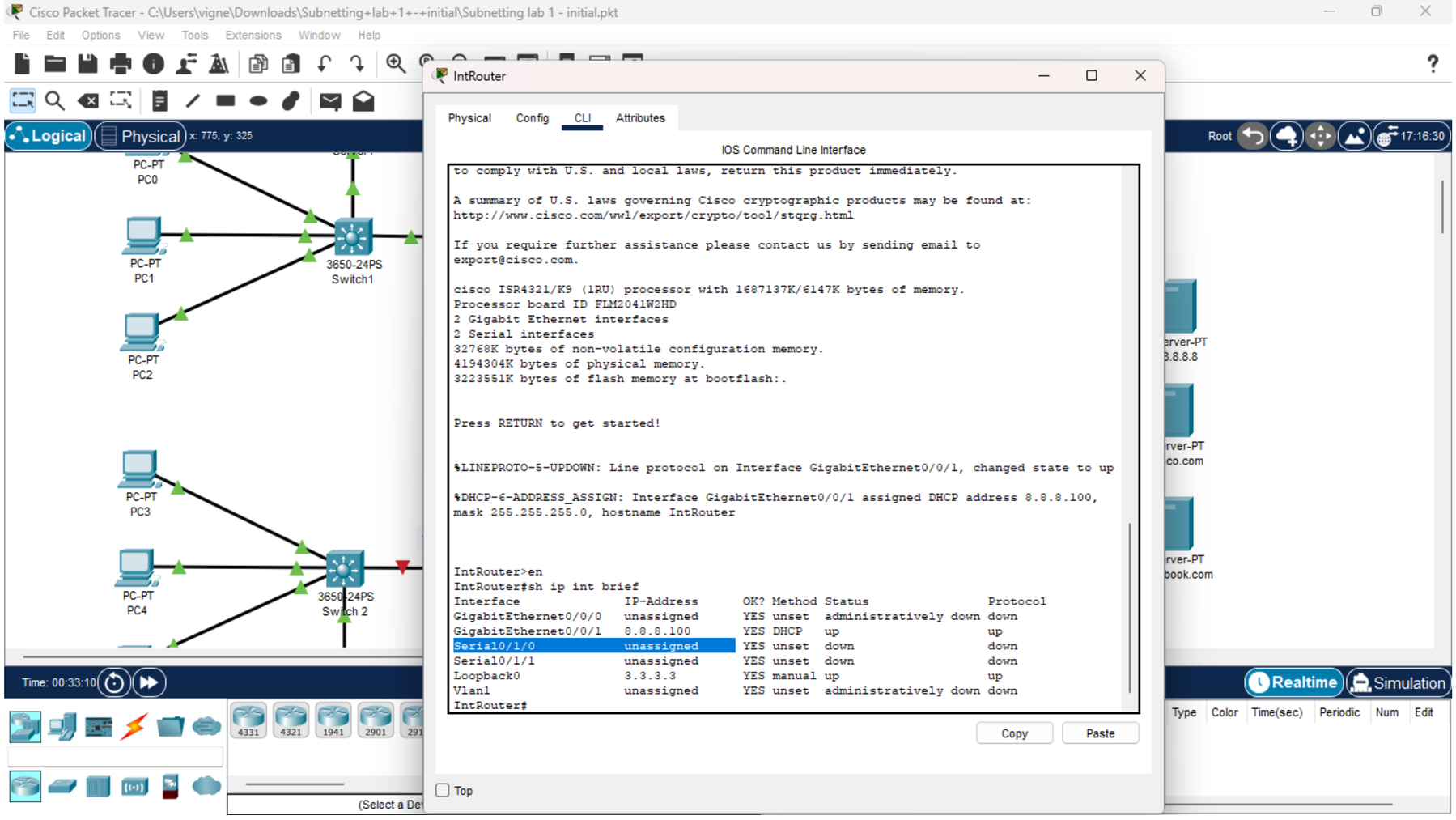
- Lets configure the DHCP server
- configure static Ip address as 192.168.1.60
- Default gateway will be the router 192.168.1.62



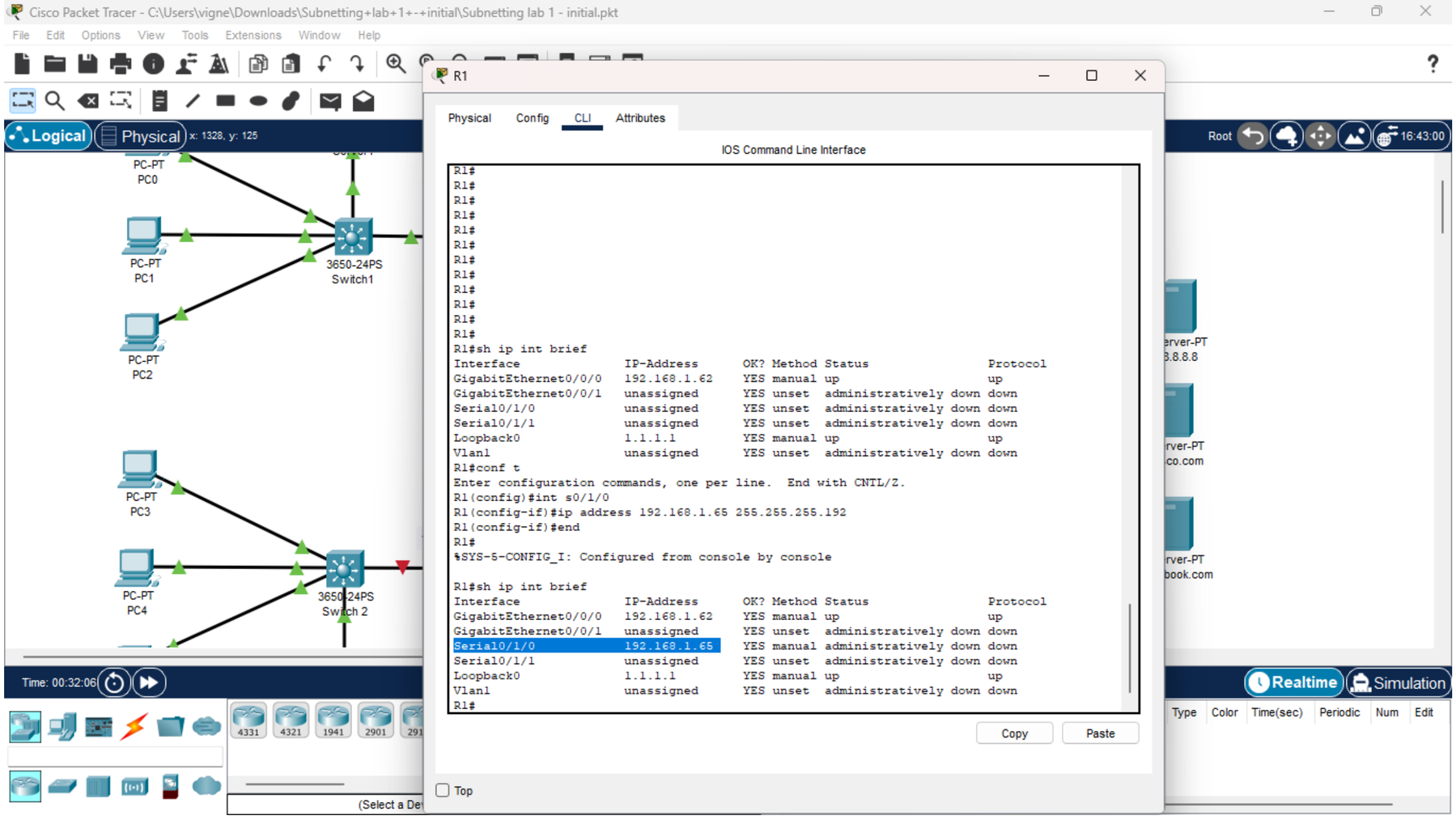
- DNS Server will be 8.8.8.9
- server has been configured
- Let’s check can we ping the switch



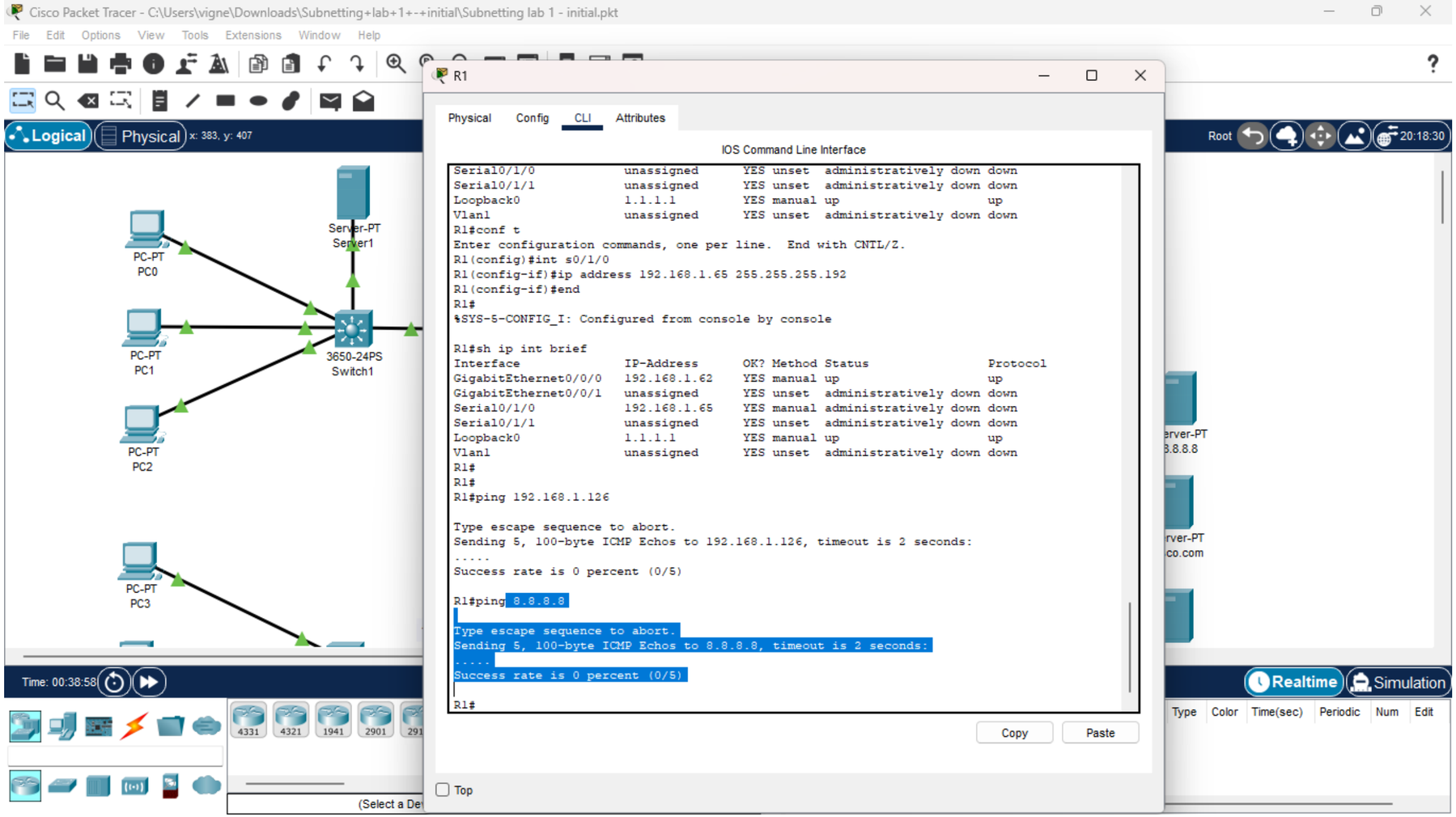
- ping is successful.
- we can ping both switch and the router



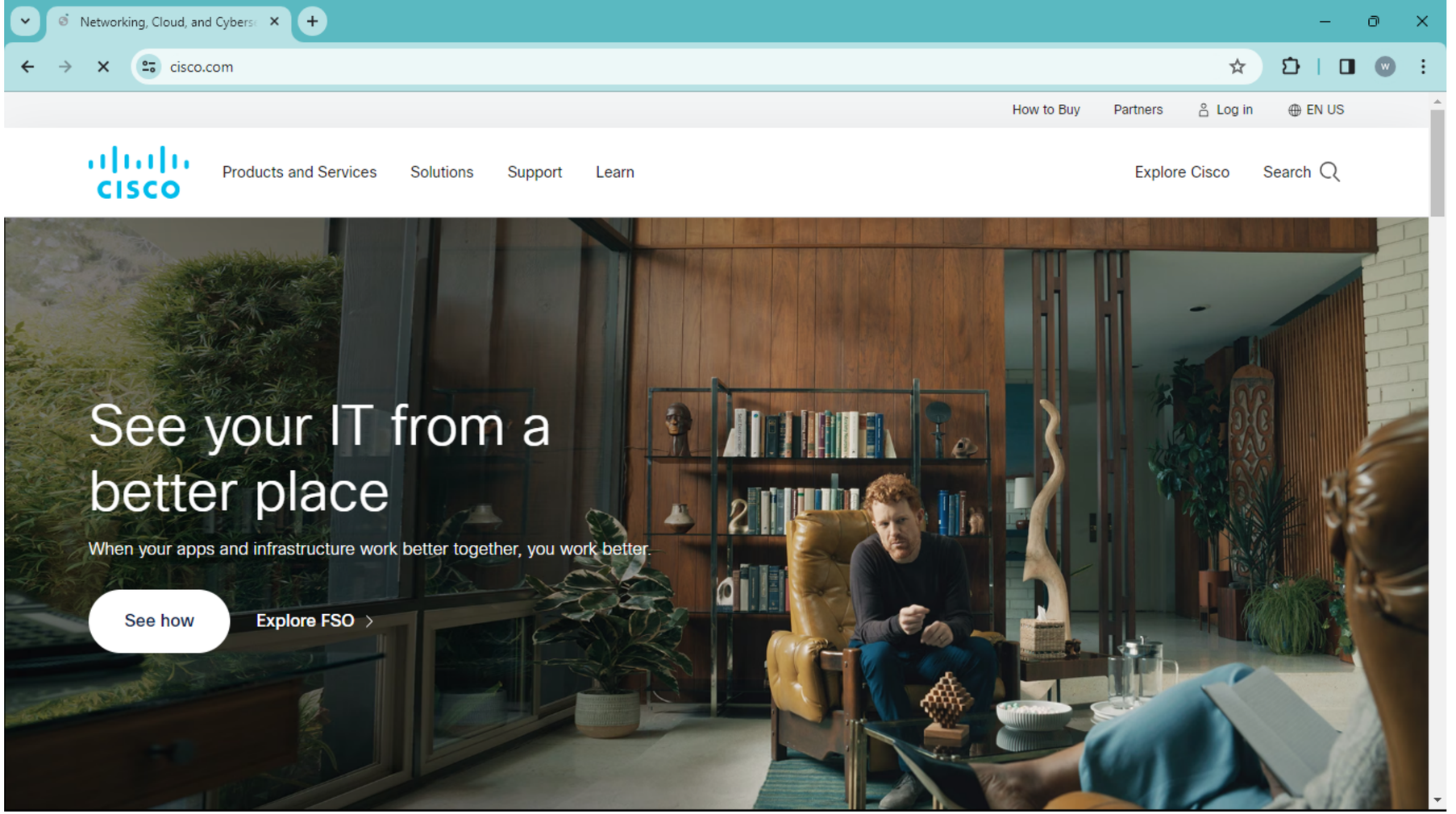
- serial interface 0/1/0 is not set
- let’s configure the interface with the 1st ip address 192.168.1.65 255.255.255.192



Successfully configured the serial interface 0/1/0 with the ip 192.168.1.65



- lets check the ip connectivity between the router and the internet by pinging
- ping is successful
- router also pings DNS server



Result :

After configuring the ip address with the subnet pc successfully reached the website