CIE 447

COMPUTER NETWORKS

Modern Hotel Network Project

BY:

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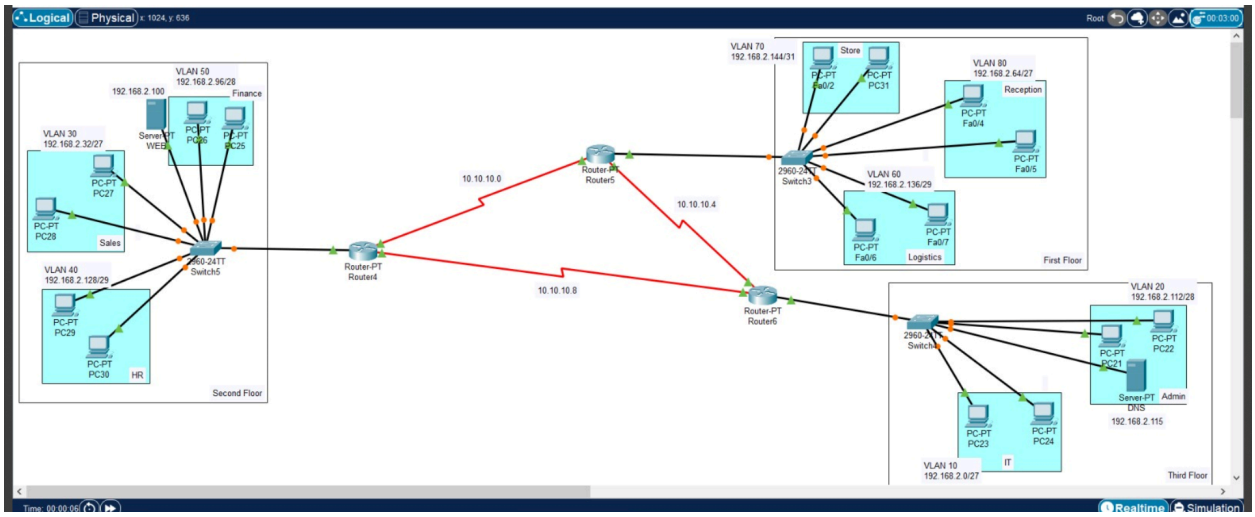
Network in packet tracer:



1-IP configuration

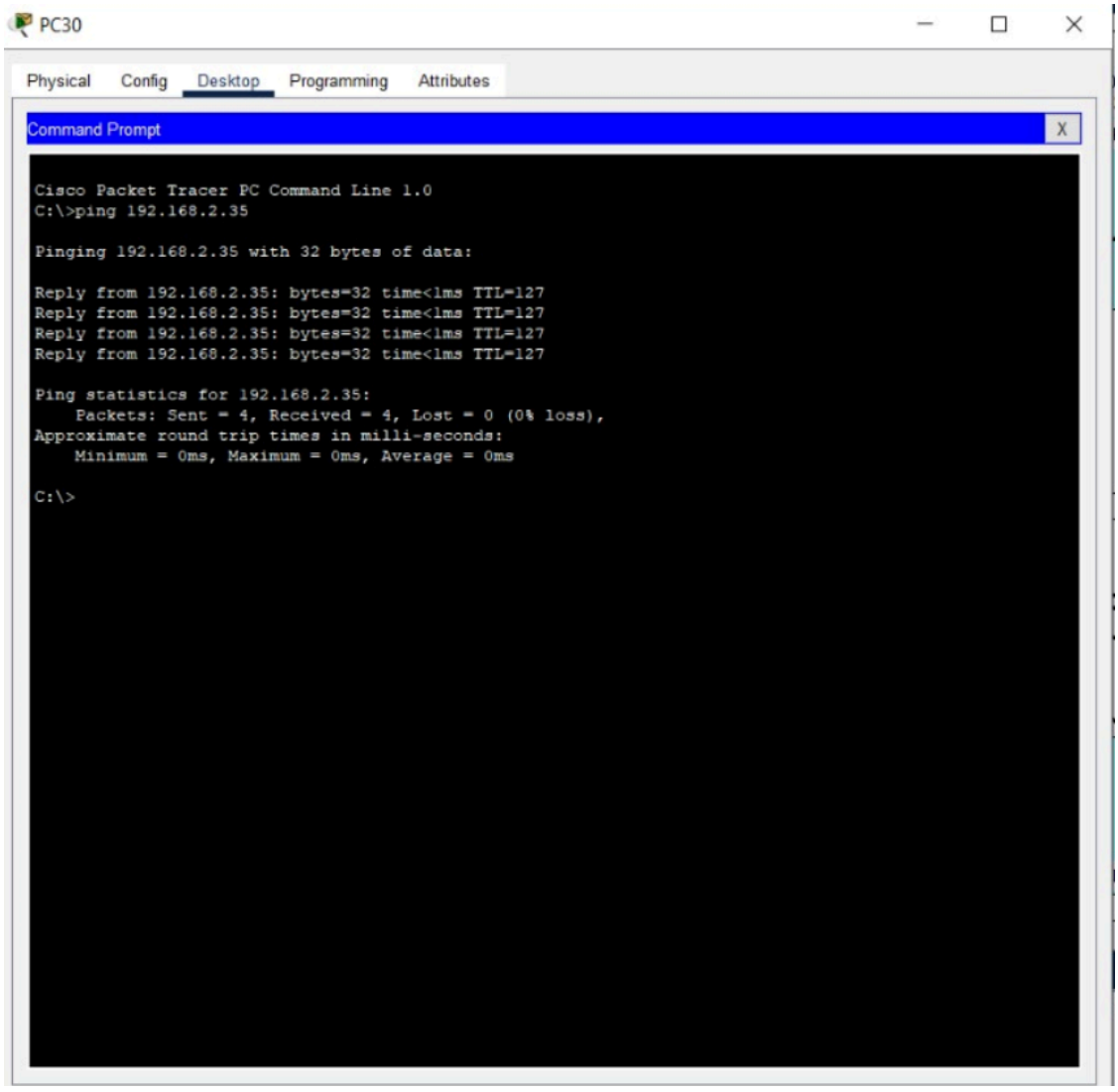
In the following table here is the subnet calculations for every vlan based on the number of devices in each department

Department	VLAN	Network IP	Subnet mask	Starting IP	Ending IP
Reception	80	192.168.2.64/27	255.255.255.224	192.168.2.65	192.168.2.94
Store	70	192.168.2.144/30	255.255.255.252	192.168.2.145	192.168.2.147
Logistics	60	192.168.2.136/29	255.255.255.248	192.168.2.137	192.168.2.142
Finance	50	192.168.2.96/28	255.255.255.240	192.168.2.97	192.168.2.110
HR	40	192.168.2.128/29	255.255.255.248	192.168.2.129	192.168.2.134
Sales	30	192.168.2.32/27	255.255.255.224	192.168.2.33	192.168.2.62
Admin	20	192.168.2.112/28	255.255.255.240	192.168.2.113	192.168.2.126
IT	10	192.168.2.0/27	255.255.255.224	192.168.2.1	192.168.2.30

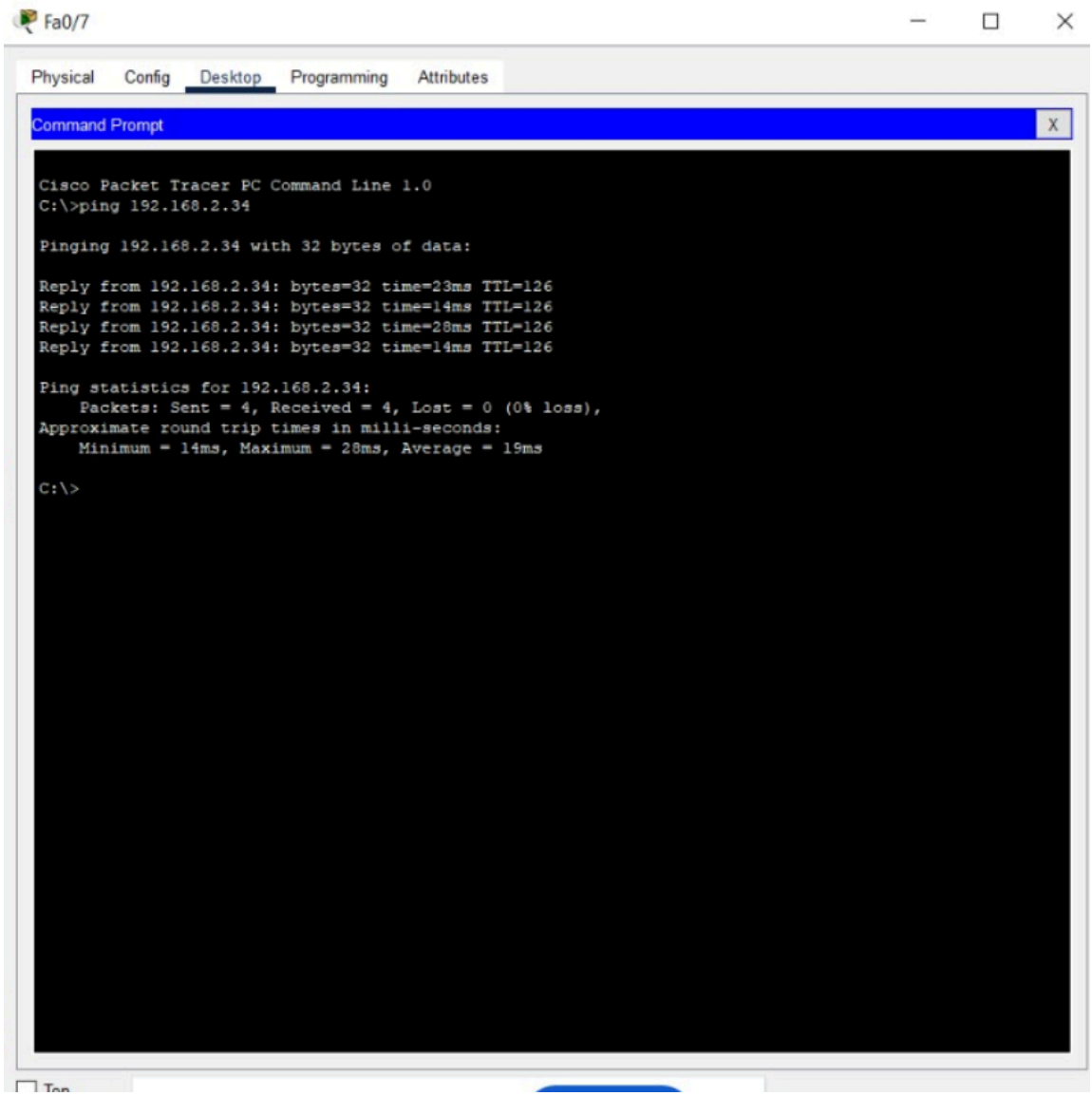
2-Testing :

A-all devices can communicate with each other within and between floors.

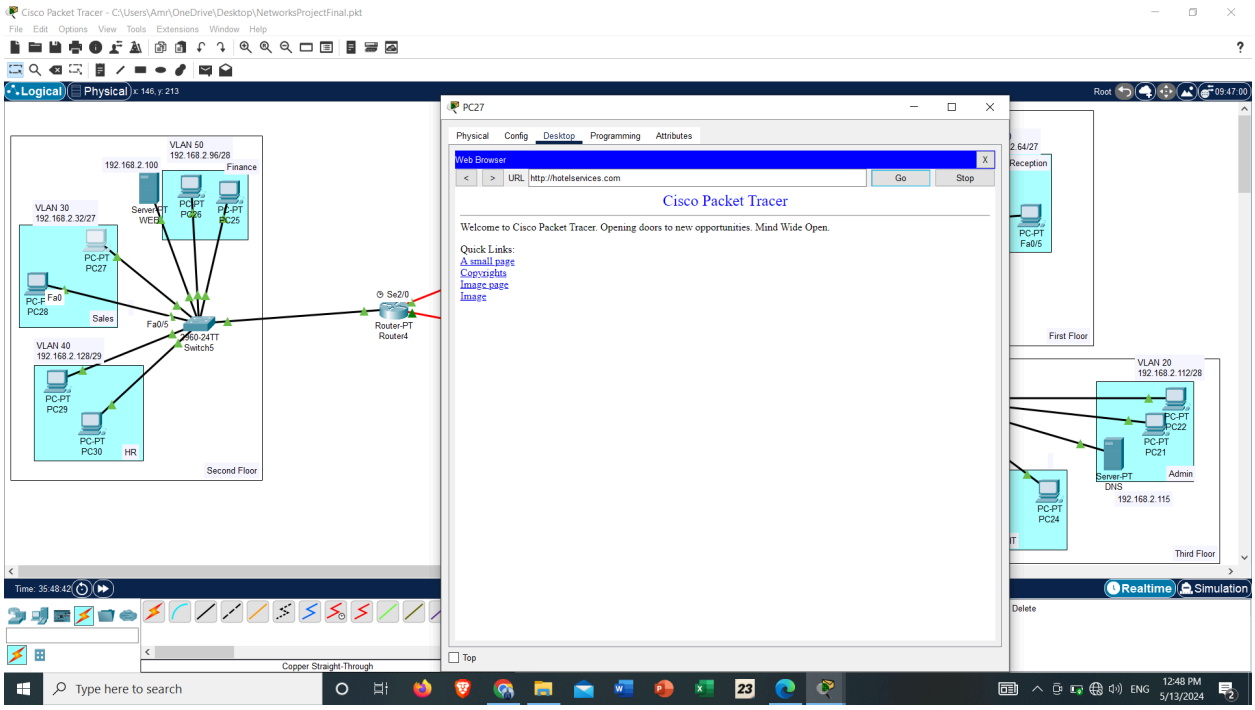
In the following figure we are try to bing a pc in the second floor with a pc in the second floor also



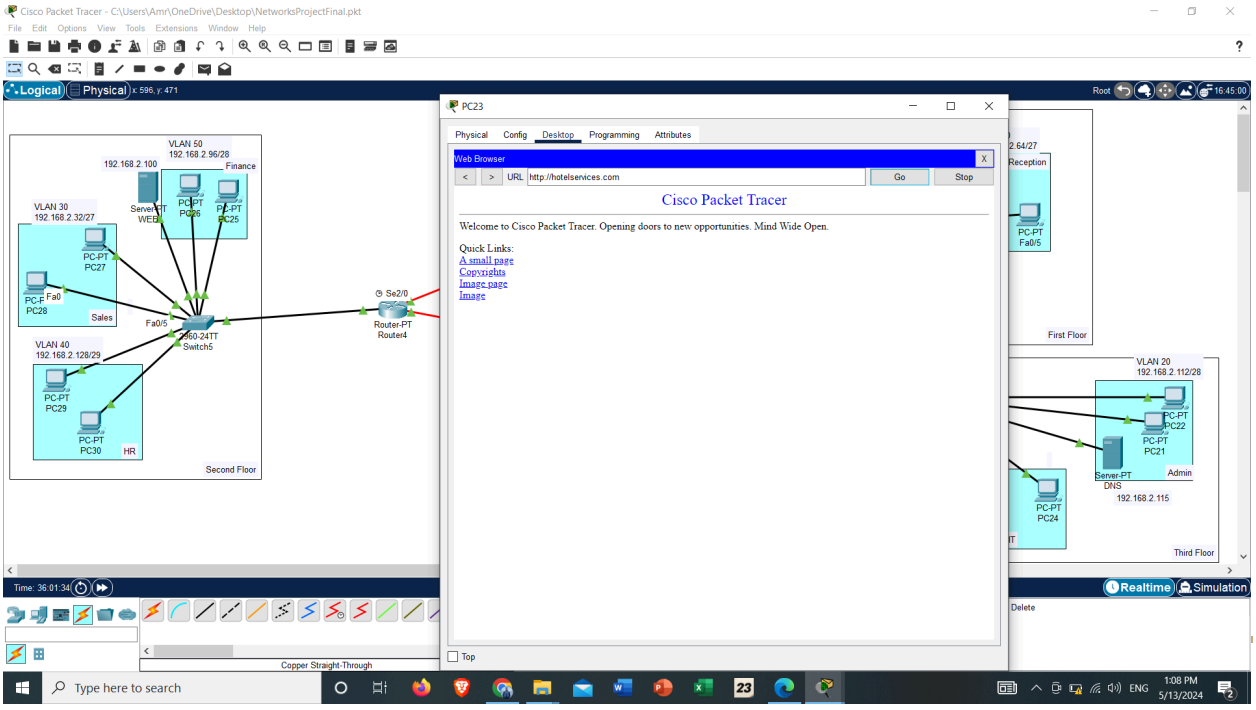
In the following figure we are trying to ping PC in the second floor in a PC first floor:



B- All devices can connect to the website within the same floor containing the DNS server



C- All devices can connect to the website within any floor



3-IP configuration after relocation:

In the following table here is the subnet calculations for every vlan after relocate the sales department to the to be in network which its IP address 192.180.1.0/24; and moving the admin department to the second

Department	VLAN	Network IP	Subnet mask	Starting IP	Ending IP
Reception	80	192.168.2.32/27	255.255.255.224	192.168.2.33	192.168.2.62
Store	70	102.168.2.112/30	255.255.255.252	102.168.2.113	102.168.2.115
Logistics	60	192.168.2.104/29	255.255.255.248	192.168.2.105	192.168.2.110
Finance	50	192.168.2.64/28	255.255.255.240	192.168.2.65	192.168.2.78
HR	40	192.168.2.96/29	255.255.255.248	192.168.2.96	192.168.2.102
Sales	30	192.180.1.0/24	255.255.255.224	192.180.1.1	192.180.1.30
Admin	20	192.168.2.80/28	255.255.255.240	192.168.2.81	192.168.2.94
IT	10	192.168.2.0/27	255.255.255.224	192.168.2.1	192.168.2.30