

**Exercise 1**

Company ABC has 100 workstations in their head office and the IT manager would like to assign

a subnetwork address for each department. He wants to create 5 subnets using the 192.168.1.0/24

block and assign the first subnetwork to their servers and the rest for their 100 workstations. How

will we compute the subnetwork requirement?

Given:

Number of workstations = 100

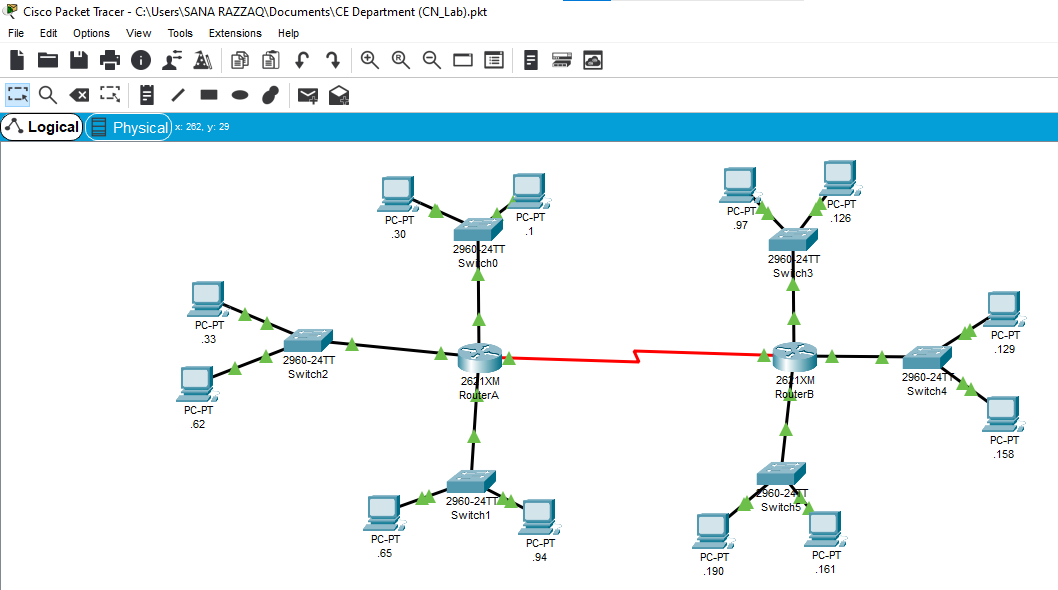
Network address = 192.168.1.0/24

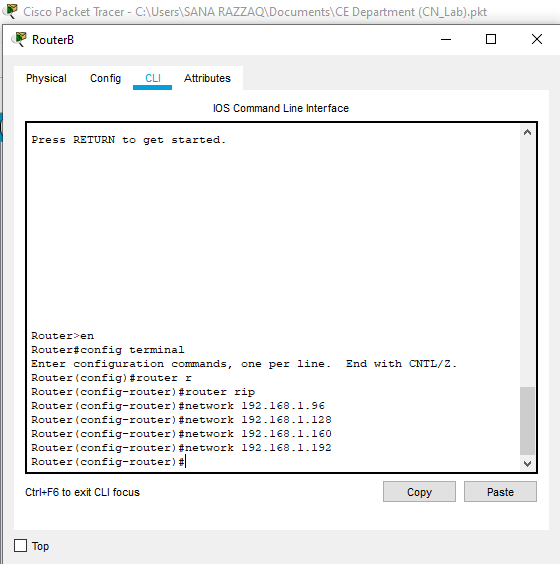
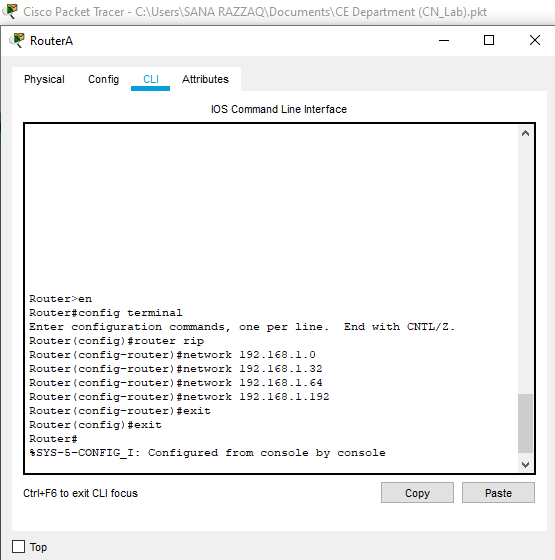
Subnets required = 5

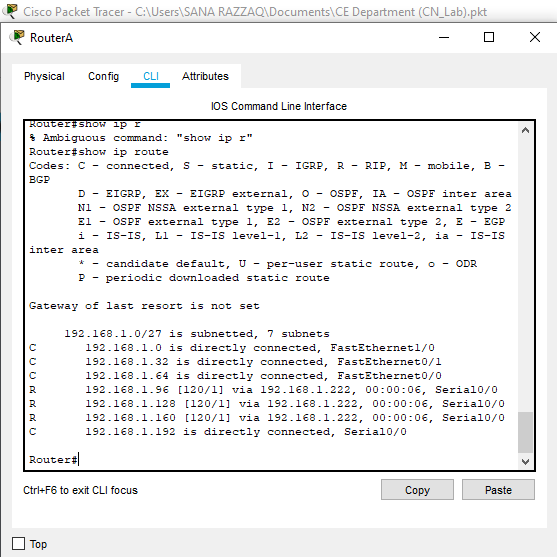
Design the network in Packet tracer and configure all routers, show packet are moving between all

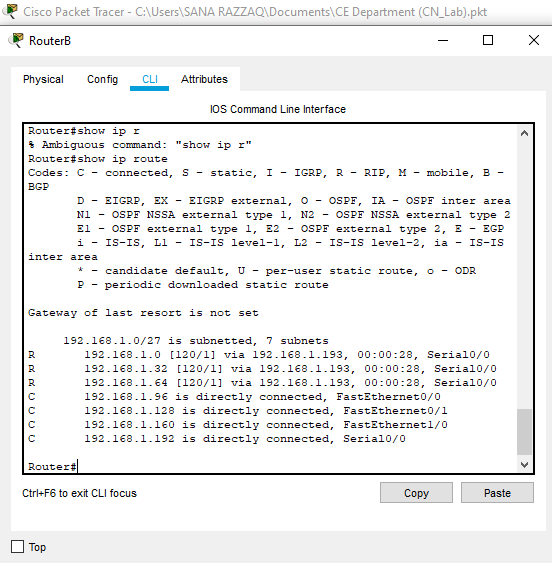
subnets using pings from various attached hosts/workstations.

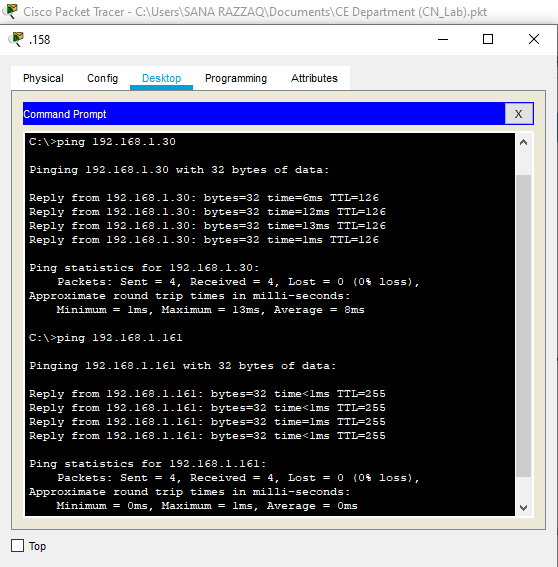
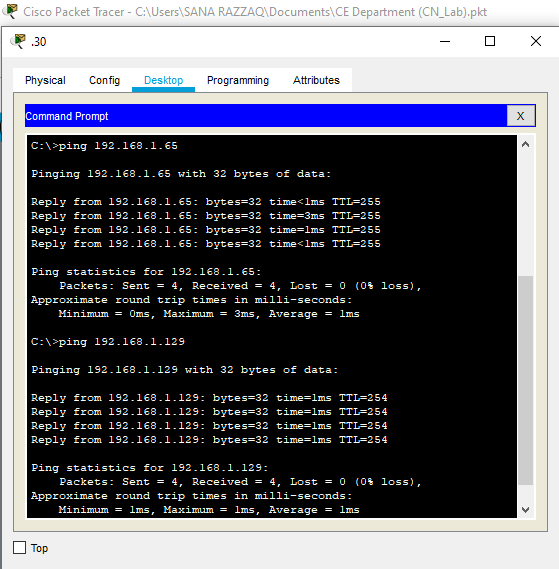
**Solution:**

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