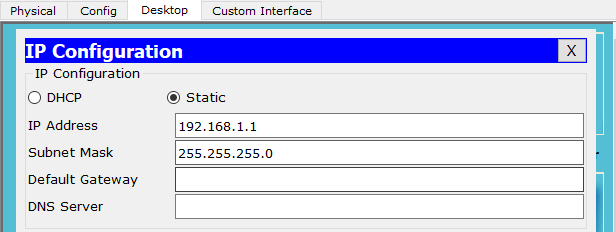
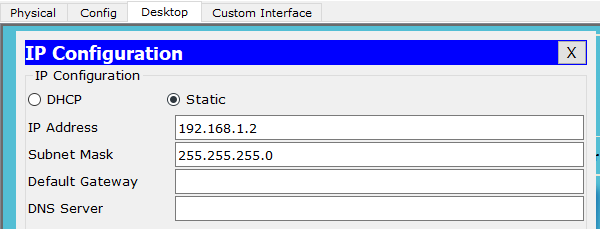
Computer Networks

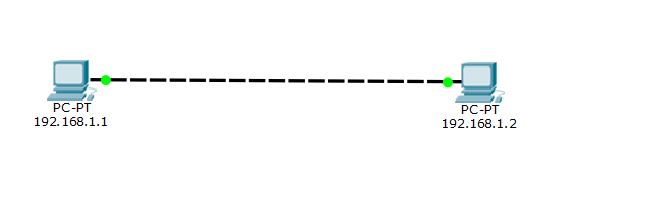
Lab # 02

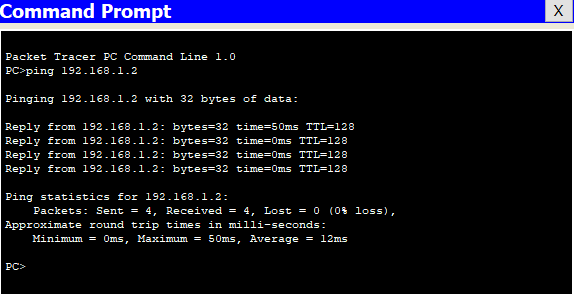
Task 1 (i)

**First Configure the PCs as shown above and verify the connection using ping command.**



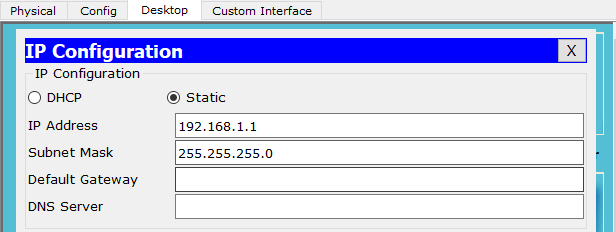


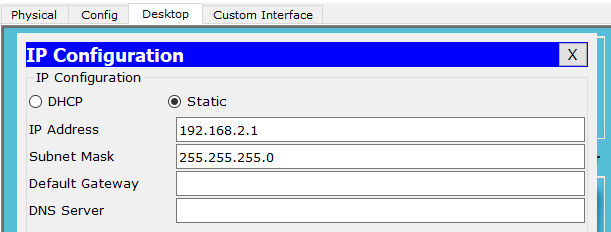


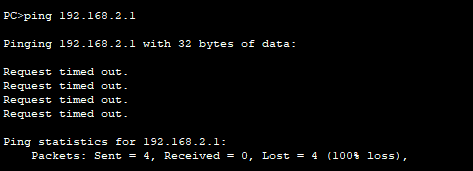


(ii) Configure PC1 as follow: IPv4: 192.168.1.1 Subnet mask: 255.255.255.0

And PC2 as: IPv4: 192.168.2.1 Subnet mask: 255.255.255.0







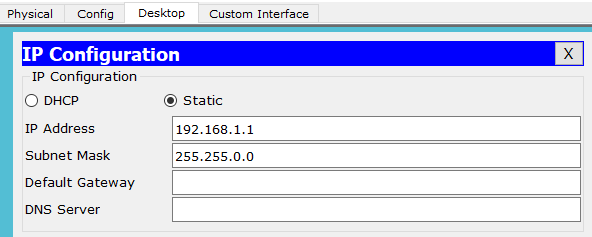
**Reason:**

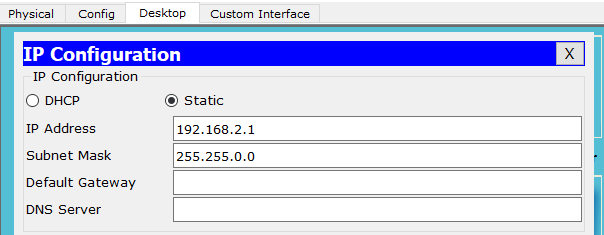
Since 255 states the network, there is a difference between IPs: 192.168.1.1 and 192.168.2.1.

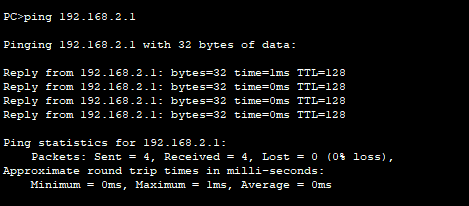
192.168.1 is not the same as the network, so it is showing a timeout.

(iii) Configure PC1 as follow: IPv4: 192.168.1.1 Subnet mask: 255.255.0.0

And PC2 as: IPv4: 192.168.2.1 Subnet mask: 255.255.0.0







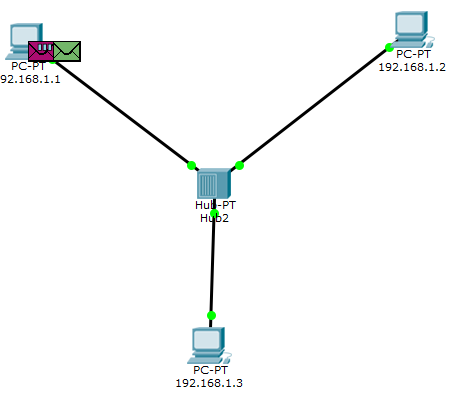
**Reason:**

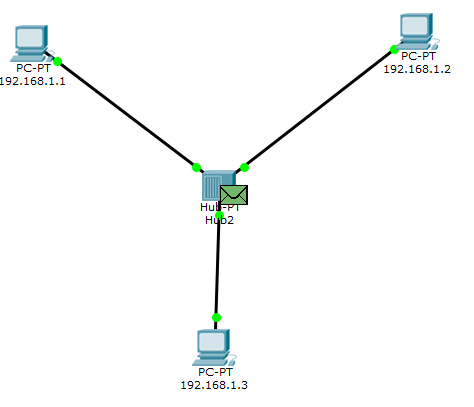
In this case, subnet mask states 255 upto 2 portions so, 192.168 should be the same in both cases.

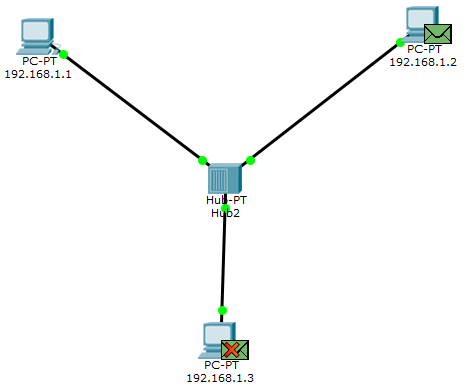
Hence the network is valid.

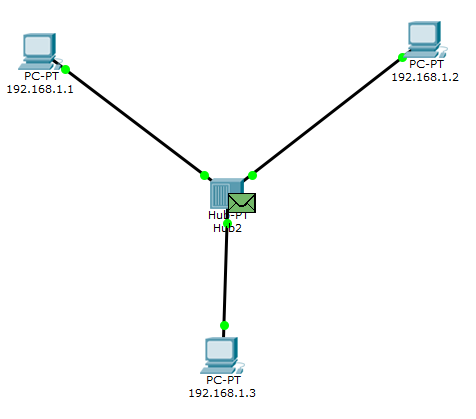
Task 1: Topology using Hub

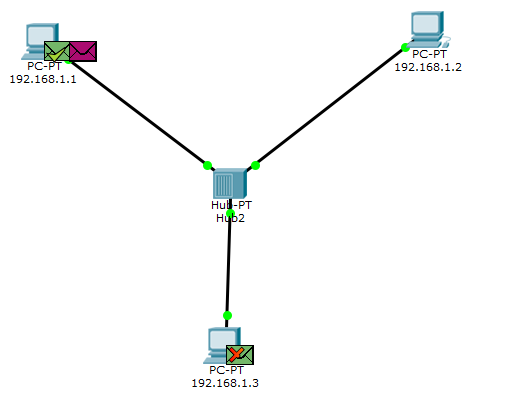
Using “Hub”, it sends messages to all systems / PCs. So, it has security issues as the file can be important.











Task 2: Topology using Switch

Using “Hub”, it sends messages to all systems / PCs. Then he came back to switch having MAC addresses of all systems. Then he knows whom to send message and then sends so.

