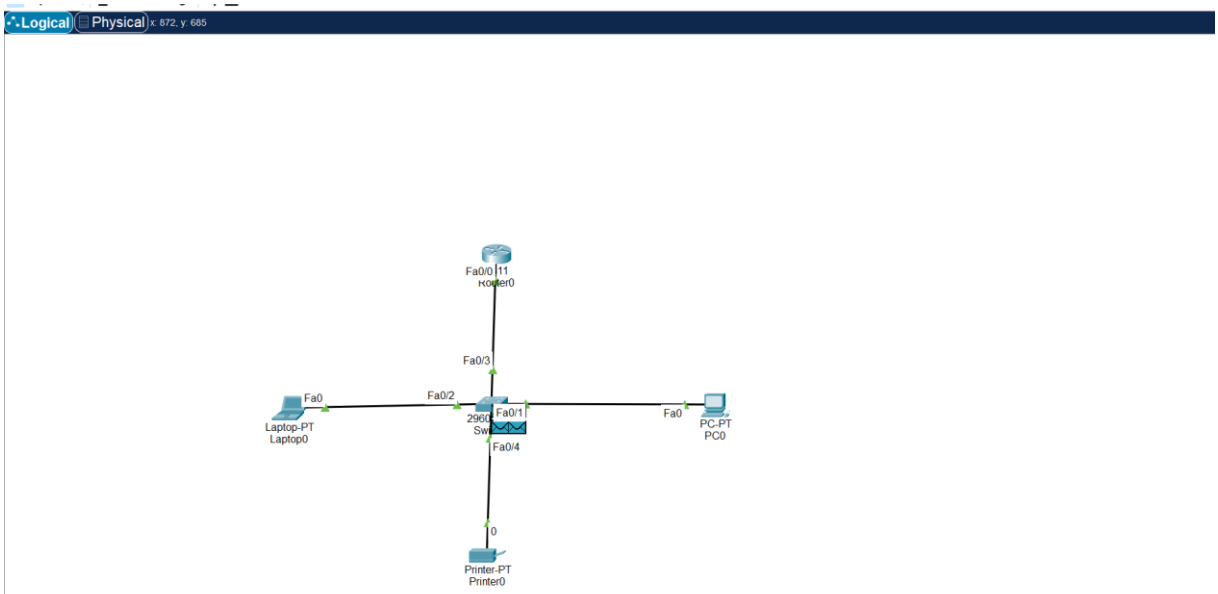

IPv4 Address/Prefix	Network Address	Broadcast Address	Total Number of Host Bits	Total Number of Hosts
172.16.104.99/27	172.16.104.96	172.16.104.127	5	30
198.133.219.250/24	198.133.219.0	198.133.219.255	8	254
10.1.113.75/19	10.1.96.0	10.1.127.255	13	8190

Having the following information, compute subnets with the following constrains: A number of 62 subnets Host IP Address: 172.16.0.0 Original Subnet Mask 255.255.0.0

A number of 62 subnets -> 6 bits
Host IP Address: 172.16.0.0
Original Subnet Mask 255.255.0.0

new SM : 255.255.252.0 10bits for host => 1022 hosts/subnet
Ip subnets: 172.16.0.0

	network bits	subnet	host	
10101100	00010000	111111	0000000000	Network address SN1
10101100	00010000	000000	1111111111	Broadcast address SN1

Having the following information, compute subnets with the following constrains: A maximum number of 29 hosts/subnet Host IP Address: 192.168.200.0 Original Subnet Mask 255.255.255.0

A maximum number of 29 hosts/subnet -> 5 bits for host, 3bits for subnet

new SM: 255.255.255.224
Ip subnets: 192.168.200.0

network	bits	subnet	host	
11000000	10101000	11001000	00000000	Network address SN1
11000000	10101000	11001000	00011111	Broadcast address SN1

Having the following information, compute subnets with the following constrains: A number of 250 subnets Host IP Address: 10.0.0.0 Original Subnet Mask 255.0.0.0 A number of 250 subnets -> 8 bits (256 subnets)

new SM: 255.255.0.0
16 bits for host => 65.534 hosts/subnet
Ip subnets: 10.0.0.0

network	bits	subnet	host	
00001010	00000000	00000000	00000000	Network address SN1
00001010	00000000	11111111	11111111	Broadcast address SN1