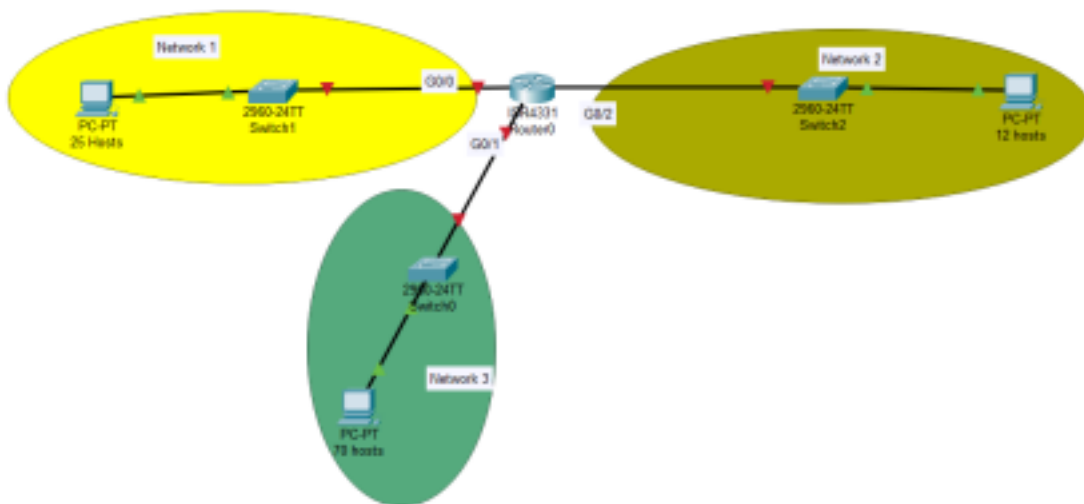


Register Number: 22B91A0422

Subnet an IPv4 Network

Activity II

Problem 1: As a network administrator you are required to manage the below networks as shown in the figure. As a first step you are required to allocate the IPV4 address range as per the requirement. Given the IP address range 198.34.72.0/24, implement an effective subnetting procedure as per the network requirement and fill up the addressing table given below.

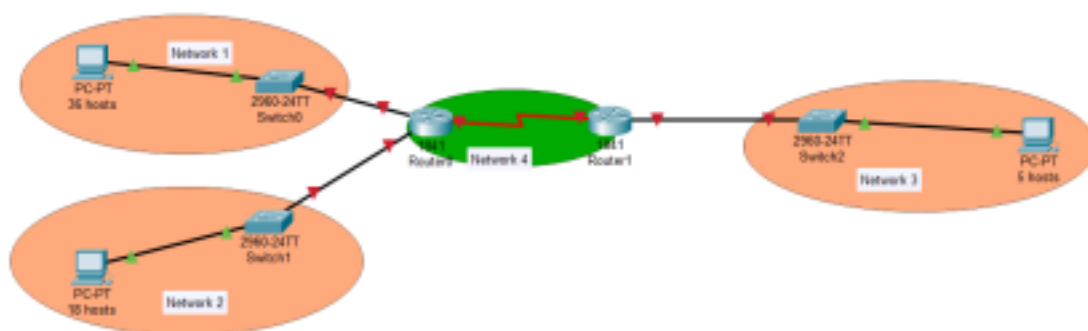


Addressing Table

Network	IP Address Range, prefix length	Subnet Mask	Network address Broadcast address	Host IP Address range	Default gateway
Network 1	198.34.72.128 to 198.34.72.159 ,/27	255.255.255.224	198.34.72.128 198.34.72.159	198.34.72.129 to 198.34.72.158	198.34.72.129
Network 2	198.34.72.160 to 198.34.72.172 ,/28	255.255.255.240	198.34.72.160 198.34.72.172	198.34.72.161 to 198.34.72.171	198.34.72.61

Network 3	198.34.72.0 to 198.34.72.1 27 ,/25	255.255.25 5.1 28	198.34.72.0 198.34.72.12 7	198.34.72.1 to 198.34.72.1 26	198.34.72.1
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Problem 2: Given the IP address range 29.0.35.128/25, implement an effective subnetting procedure as per the network requirement and fill up the addressing table given below.



Note: For a WAN network network address, broadcast address and default gateway are not applicable.

Addressing Table

Network	IP Address Range, prefix length	Subnet Mask	Network address	Broadcast address	Host IP Address range	Default gateway
Network 1	29.0.35.1 28 to 29.0.35.1 91 ,/26	255.255.255.192	29.0.35.12 8	29.0.35.191	29.0.35.1 29 to 29.0.35.19 0, /26	29.0.35. 12 9

Network 2	29.0.35.1 92 to 29.0.35.2 23 ,/27	255.255.255.224	29.0.35.19 29.0.35.223 2	29.0.35.1 93 to 29.0.35.22 2, /27	29.0.35. 19 3
Network 3	29.0.35.2 24 to	255.255.255.248	29.0.35.22 29.0.35.231 4	29.0.35.2 25 to	29.0.35. 22 5

	29.0.35.2 31 ,/29			29.0.35.23 0/ 29	
Network 4	29.0.35.2 32 to 29.0.35.2 35 ,/30	255.255.255.252	29.0.35.23 29.0.35.235 2	29.0.35.2 33 to 29.0.35.23 4, /30	29.0.35. 23 3