ADVANCED SUBNETTING
VARIABLE LENGTH SUBNET MASKS (VLSM)

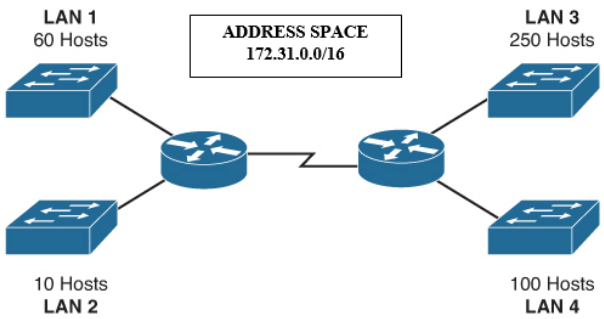
Instructions:

In a team of two, examine the topology below and attempt the questions that follow.
You will upload your answers on e-learning as follows:

1. **Parts (a), (b) and (c)** can be handwritten, scanned into a PDF then uploaded as one document on eLearning. You may also type the work and upload it as a PDF. In each case show all your working
   ***NB**: Ensure that you capture the admission numbers and names of the team members on each page of the uploaded document*
   Part (d) will be uploaded as a packet tracer file.
   ***NB**: Ensure that you capture the admission numbers and names of the team members on each page of the uploaded document*
2. For both (1) and (2) above, ensure that you capture the admission numbers and names of the team members.
   ***Note**: Only two people should be in the team.*
3. Only **one person** should upload the work on behalf of the team

Exercise

You are a network administrator of an organization which has the following topology.
Assume that each LAN represents a branch whose internal IP addresses have to be allocated from the given address space.



a) Subnet the address without regard for network size *(without VLSM)*. Place your results in a subnet chart. Write only the first 5 subnets.
b) Subnet the address with regard for network size, ensuring that your subnets are not wasteful *(with VSLM)*. Place your results in a subnet chart. Write only the first 5 subnets.
c) Comment on the two charts
d) In packet tracer connect the devices for LANs 1 and 2 only and configure IP settings. Include 2 end devices per LAN to represent those in each of the two LANs.