Network protocols I Assignment

1. Given the following addresses (in two different blocks) 134.45.67.23 and 28.56.123.200
   For each of them, extract the following information
   i) First address ii) Last address iii) Number of addresses in the block.
   iv) Network mask
   Draw network diagrams indicating addresses and netid.
2. Given the following addresses (in two different blocks) 68.45.67.23 & 204.56.77.123
   For each of them, extract the following information
   i) First address ii) Last address iii) Number of addresses in the block.
   iv) Network mask
   Draw network diagrams indicating addresses and netid.
3. Given the following addresses (in two different blocks) 191.23.45.56 & 193.45.67.23
   For each of them, extract the following information
   i) First address ii) Last address iii) Number of addresses in the block.
   iv) Network mask
   Draw network diagrams indicating addresses and netid.
4. An ISP is granted a block of addresses starting with 150.80.0.0/16. The ISP wants to distribute these blocks as follows:
   a. The first group has 64 medium-size businesses; each needs approximately 128 addresses.
   b. The second group has 128 small businesses; each needs approximately 128 addresses.
   Design the subblocks and give the slash notation. Find out how many addresses are still available after these allocations.
5. An ISP is granted a block of addresses starting with 120.60.4.0/20. The ISP wants to distribute these blocks to 100 organizations with each organization receiving 8 addresses only. Design the subblocks and give the slash notation for each subblock. Find out how many addresses are still available after these allocations.