

5. (8 pt) Below is a list of requests for network address allocations to a service provider. The service provider allocates addresses in the order of organization 1, 2, 3 and 4, beginning at 234.195.0.0.

Organization 1: 350 hosts
Organization 2: 1500 hosts
Organization 3: 400 hosts
Organization 4: 4000 hosts

Show the resulting address allocations with CIDR notation.

Once these have been allocated, also show the gaps that exist of unallocated addresses in between those of the networks above.

	Notation of CIDR Address allocation	Range of Addresses Allocated
Organization 1		
Organization 2		
Organization 3		
Organization 4		

Org1: 234.195.0.0/23
Range:234.195.0.0~234.195.1.255
Bin:[234.195.00000000.00000000 ~ 234.195.00000001.11111111]
Org2: 234.195.8.0/21
Range: 234.195.8.0~234.195.15.255
Bin:[234.195.00001000.00000000 ~ 234.195.00001111.11111111]
Org3: 234.195.2.0/23
Range:234.195.2.0~234.195.3.255
Bin:[234.195.00000010.00000000 ~ 234.195.00000011.11111111]
Org4: 234.195.16.0/20
Range:234.195.16.0~234.195.31.255