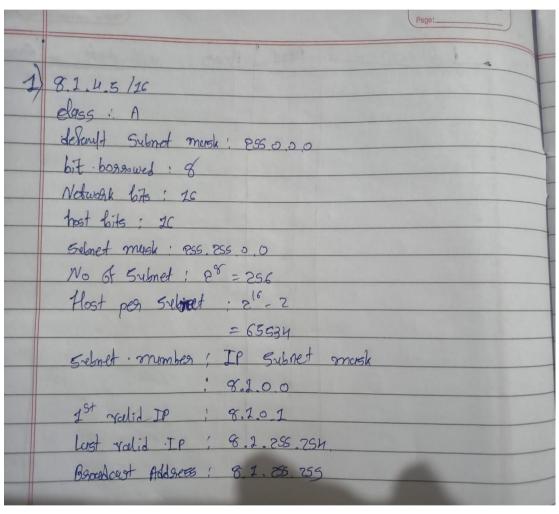
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Study of IP Addressing and sub-netting.

Practical Assignment #09:

- 1. Find default subnet marks, network bits, host bits, hosts per subnet, no of subnets, subnet number, 1st valid IP address, last valid IP address, and broadcast address.
 - 8.1.4.5/16



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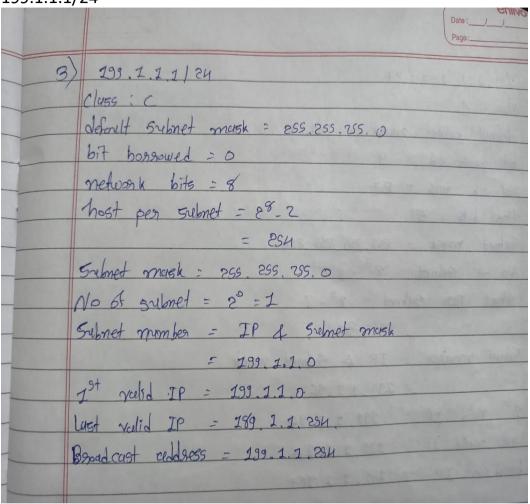
130.4.102.1/24 ii.

100111	102.1/24
2)	130 H.102. 1724
	- class . B
	defant submet mask; 255, 255, 00
	bit bogsowed; &
	network bit: 8 host bit:8
	Subnet mask: 255.255.25.0
	No of Subjects: 28 = 256
	floot per subnet! 28-2
	= 254
	Subnet number ; IP & Subnet mask
	= 180 4.120,0
	137 Valid IP: 180.4.202.1
	Lord Volld. IP ; 280.4 102. 354
	Broad cost address: 130 H 102.255

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199.1.1.1/24 iii.



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130.4.102.1/22 iv.

	02.1/22
1	
	(7 130.H.102.1 /22
	Class - B
	hit does not must = 255, 255, 0,0.
	bit bossowed = 6
	network bits = 22
	Host 15.
	Host bits = 10
	5. bnot mask = 255, 255, 255, 0
	No of 54bnet = 26 = 64
	flost per selnet = 20-2
	= 1077
	5ubnet number = IP & Subnet mask
	= 130, 4, 100, 0
	Ist valid IP = 130. H. 100. I
	last valid IP = 130. 4, 103. 254
	baxed cast addgess = 130 4.108.255

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199.1.1.100/27 ٧.

199.	1.1.100/27
5>	199.1.1 100 / 27
	class = >
	default subnet musk = 255,255,255,0
	bit bossowed = 3
	Notaion h bits = 27
	Host 15ts = 5
	Subnet mask - 255, 255, 254.
	No of signot = 23 - 8
	Host per subnet = 25-2
	> 30
	Sylmet number = IP & Subnet master
	= 199.1.1.96
	1st volid pp = 199 1.1.97
	last reelid IP = 199. 2. 2. 126
	brack (ast IP = 199. 1.2.977

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2. A host in a class C network has been assigned an IP address 192.168.17.9. Find the number of addresses in the block, the first address, and the last address.

2	Hose, Chass = C
	50, Host bit = 8
	No of Address in the block - 28
	= 256
	(with valid host) = (28-2) = 256
	1 St address = 132 168 17.0
	lust chalsess = 192 168 17 255.

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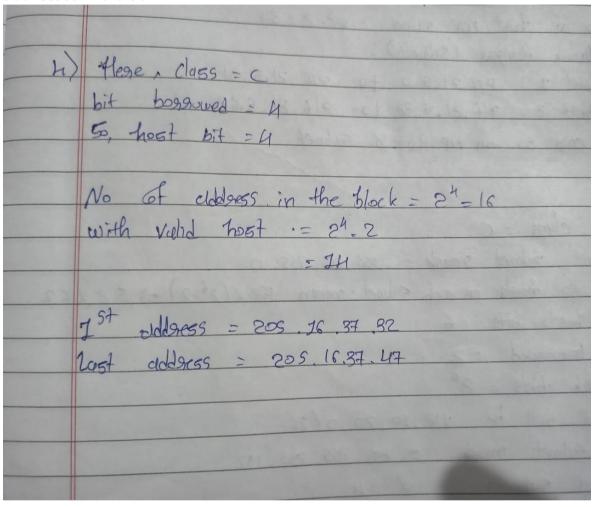
3. An address in a block is given as 185.28.17.9. Find the number of addresses in the block, the first address, and the last address.

Broth, th	Te first address, and the last address.
3)	Here, class = B 50, Host bit = 16
***	No of address in the black = 216 = 65536
	with valid hoofs = (216-2) = 65534
	1 st address = 185.28.0.0 Last address = 185.78.255.755.

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4. A block of addresses is granted to a small organization. We know that one of the addresses is 205.16.37.39/28. What is the first address, last address, number of addresses in a block.



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5. Subnet the IP address 216.21.5.0 into 30 hosts in each subnet. Find Class, Default Mask, Bit Borrowed, New subnet mask, No. of Hosts & Subnet, Network Ranges (Subnets).

5	Hese, cluss = C
	default musk = 255, 255, 755, 0
	these, 30 yosts in each submet means = (25-2)
	De de la la la contra de la contra del la contra de la contra de la contra de la contra del
	50, thost bit = 5, Network bit = 27
	Carles about him day
	50, IP = 276.21.5.0.127
	bit boggowed = 3
	new zubnet mask - 255, 255, 255, 254.
	No of Subnets = 23 = 8
	No of host per subnet = 25-2=30
	Vetwogh Rungers (52bnets):
	Subnet 1: 216.21.5.0 to 276,21.5.31
	Subnet 2! 216.21.5.32 to 216.21.5.63
	and so on all to 8 subnet.

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6. Subnet the IP address 192.10.20.0 into 52 hosts in each subnet. Find Class, Default Mask, Bit Borrowed, New subnet mask, No. of Hosts & Subnet, Network Ranges (Subnets).

6) Here, class = C
deC-11 01 1
default Sylmet musik = 285 255 .755 0
118e, 52 hosts in each solonet mean 52/(26-2) = 52/(26-2)
50 hosts bits = 6
bit boggawed = 2
Nedwork bits = 26
50, IP will be 192.10, 20, 0/26
New colors
New Subnet mask = 85, 255, 255, 192
No of Subnets = 22 = 4
No of valid hosts per submet = 26 = 2 = 62
- 2 - 6 2 - 6 2
Network Rungers (Subnets):
Selmet 1; 192.10.20.0 to 192.10,20.63
Submet 2: 192 10. 20.64 to 192, 10. 20, 123
and so on up to 4 sybnet.
and so on a some.