

Faculty of Computing



[Computer Communications & Network]

Lab No 6 Tasks

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Task 1: Write the IP address 222.1.1.20 mask 255.255.255.192 in CIDR.

Subnet Mask : 11111111. 11111111. 11111111. 11000000

CIDR : 222.1.1.20/26

Task 2: Write is the IP address 135.1.1.25 mask 255.255. 248.0 in CIDR notation.

Subnet Mask : 11111111. 11111111. 11111000. 00000000

CIDR : 135.1.1.25/21

Task 3: You have been allocated a class C network address of 201.1.1.0 how may hosts can you have?

8bits = hosts

$2^8 - 2 = 254$ hosts

Task 4: You have been allocated a class A network address of 21.0.0.0. You need create at least 10 networks and each network will support a maximum of 100 hosts. Would the following two subnet masks Work.

255.255.0.0 and or 255.255.255.0

It is valid for both.

a) 255.255.0.0:

255.255.0.0

One Octet = 1 byte= 8 bits

$2^8 = 256$ subnets.

$2^{16} - 2 = 65534$ hosts

b) 255.255.255.0

255.255.255.0

$2^{16} = 65536$ subnets

$2^8 = 256$ host

Task 5: You have been allocated a Class B network address of 129.1.0.0. You have subnetted it using the subnet mask 255.255.255.0 How many networks can you Have and how many hosts can you place on each network?

255.255.255.0

Number of networks: $2^8=256$

Number of hosts: $2^8 - 2 = 254$