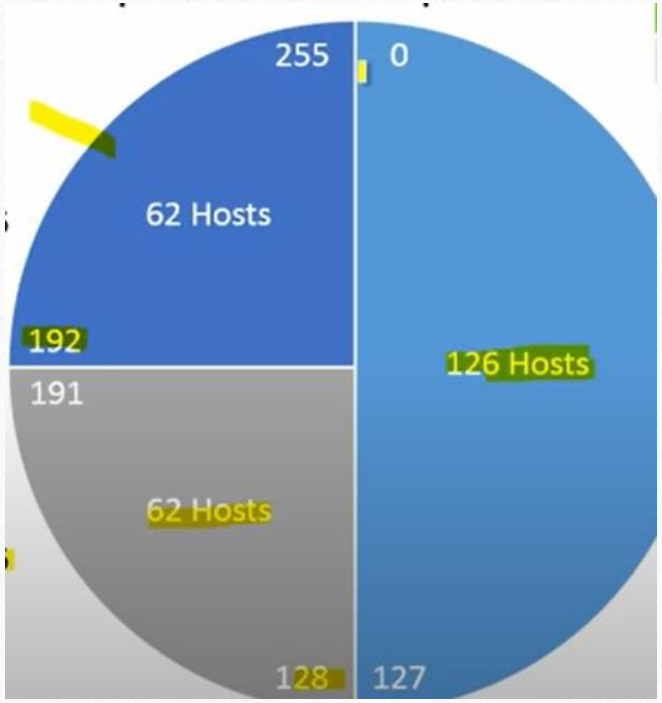
DAY 8

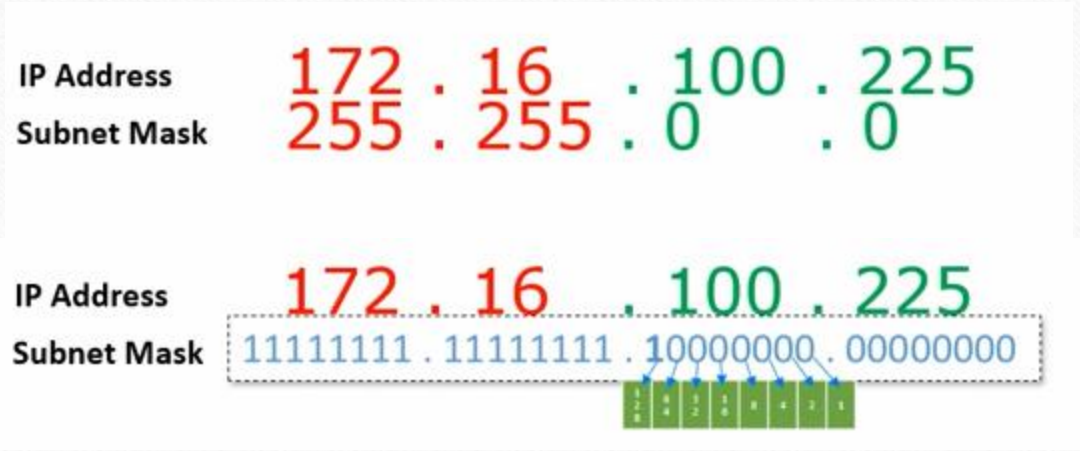
VLSM

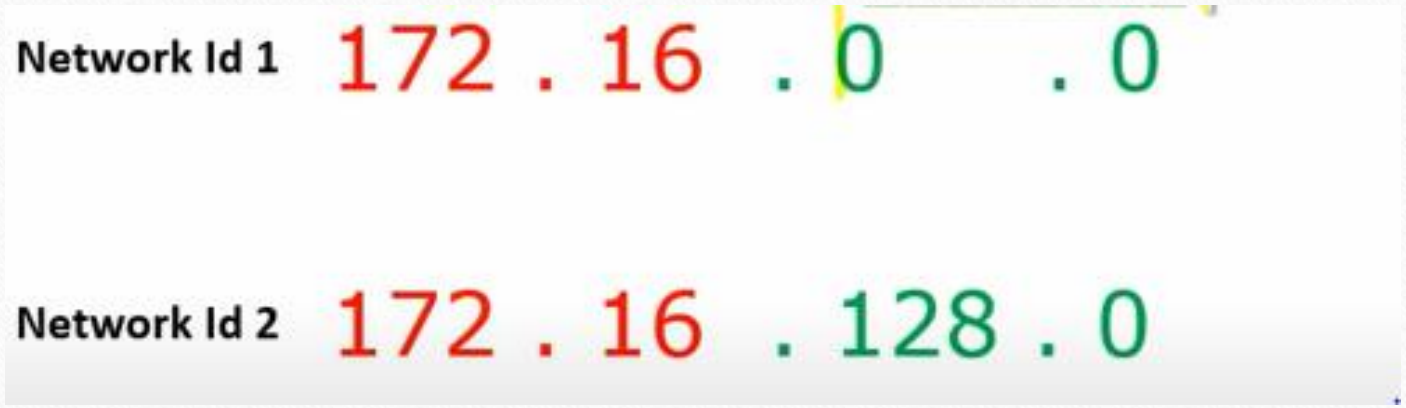
Requirements:

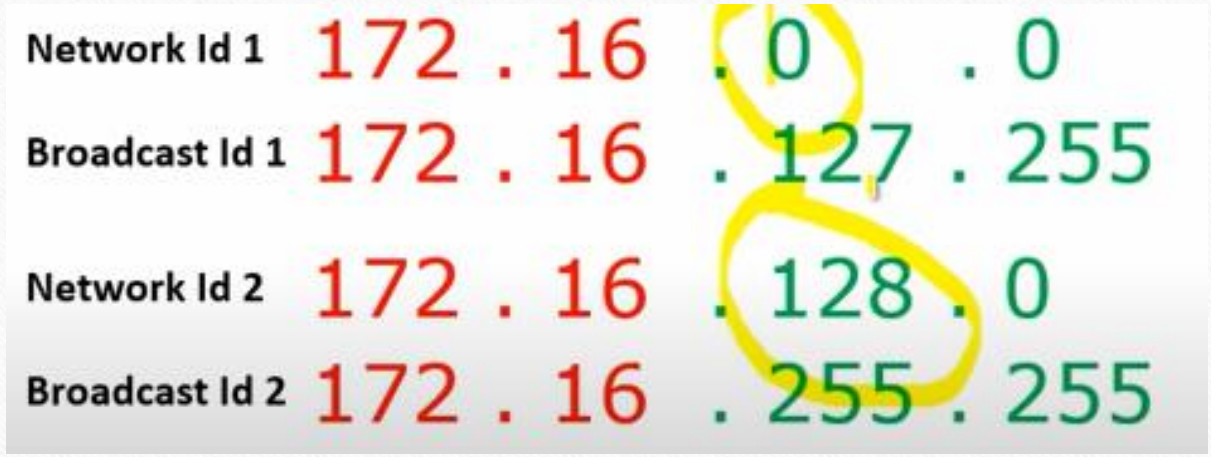
1) Create 3 Sub-networks
2) Use a Class C IP address: 192.168.1.0
3) Determine the Network Id and Broadcast Id of all the subnets


255
0
62 Hosts
192
126 Hosts
191
62 Hosts
128
127

CLASS B

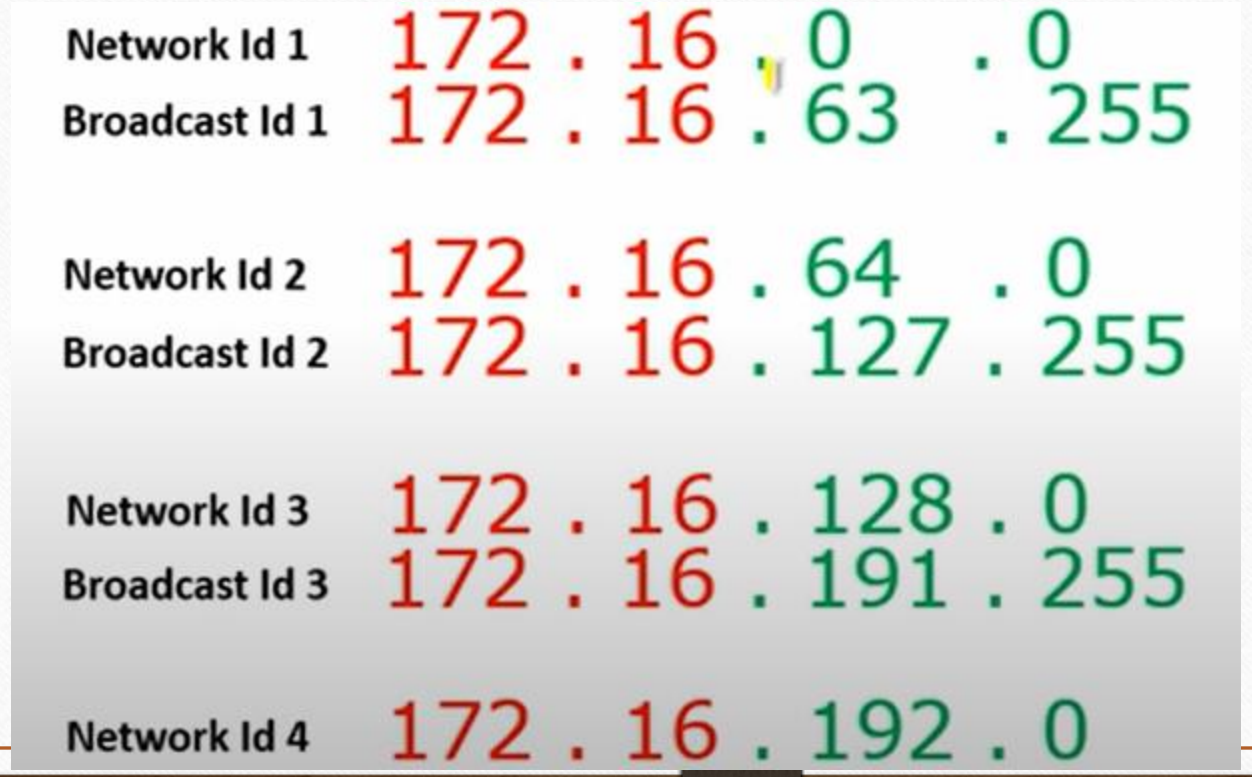

IP Address
172 . 16 . 100 . 225
Subnet Mask
255 . 255 . 0 . 0
IP Address
172 . 16 . 100 . 225
Subnet Mask
11111111 . 11111111 . 10000000 . 00000000


Network Id 1
172 . 16 . 0 . 0
Network Id 2
172 . 16 . 128 . 0


Network Id 1 172 . 16 . 0 . 0
Broadcast Id 1 172 . 16 . 127 . 255
Network Id 2 172 . 16 . 128 . 0
Broadcast Id 2 172 . 16 . 255 . 255

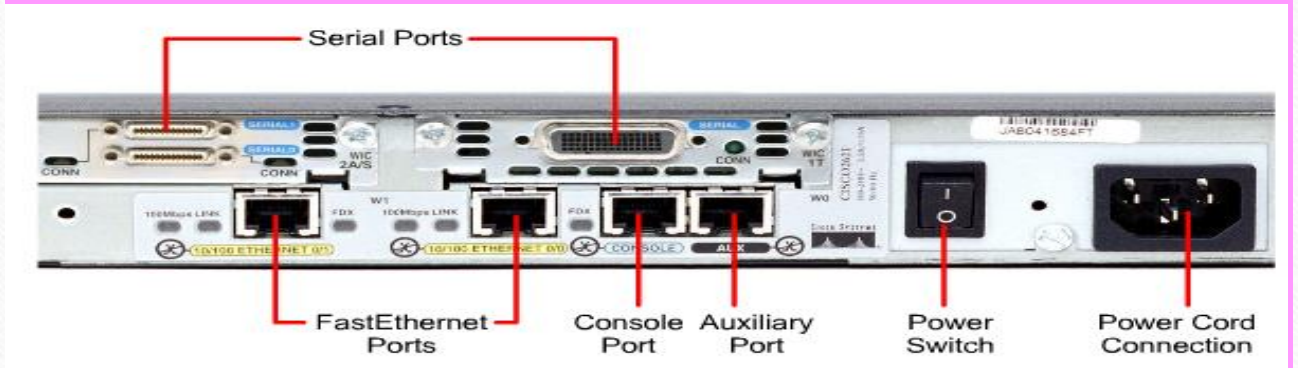
IP Address	172 . 16 . 100 . 225
Subnet Mask	255 . 255 . 0 . 0

IP Address	172 . 16 . 100 . 225
Subnet Mask	11111111 . 11111111 . 11000000 . 00000000


Network Id 1
172 . 16 . 0 . 0
Broadcast Id 1
172 . 16 . 63 . 255
Network Id 2
172 . 16 . 64 . 0
Broadcast Id 2
172 . 16 . 127 . 255
Network Id 3
172 . 16 . 128 . 0
Broadcast Id 3
172 . 16 . 191 . 255
Network Id 4
172 . 16 . 192 . 0

ROUTING

2601 Model Router



Console Port:

- It is a 8-pin modular.
- It uses RJ-45 connector.
- Used to access the router IOS
- Connected to computer's com/RS232 port.
- Used to configure brand new routers.
- We use some software application to gain access to router
- Windows: hypertermial, teraterm and putty
- Linux: minicom

Ethernet Port:

It is a 8-pin modular.

It uses RJ-45 connector.

It is connected to the switch.

We can have either Ethernet, fastethernet or gigabit Ethernet port

Ethernet(e) → 10 Mbps.

FastEthernet(f) → 100 Mbps.

GigabitEthernet(g) → 1000 Mbps.

Serial Port / WIC:

It is connected to ISP (lease line/Frame relay line).

It is connected to ISP via CSU/DSU Modem.

CSU → Channel Service Unit

DSU→ Data Service Unit

It is a 60-pin modular.

It uses Database (DB) connector.

AUX Port:

- It is 8-pin modular.
- It uses RJ-45 connector.
- It is connected to modem.
- When the router is “out-of-band”, then the router can be accessed via modem for troubleshooting.

ASSIGNMENTS

- INSTALL PACKET TRACER ON YOUR SYSTEM
- WRITE A NOTE ON ANY 5 IMPORTANT NETWORKING COMMANDS

THANK YOU