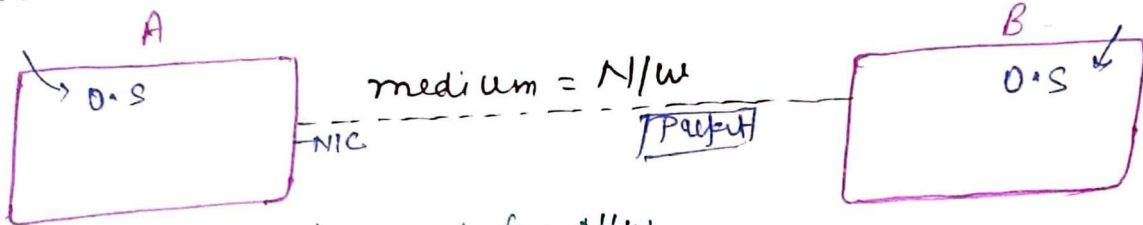
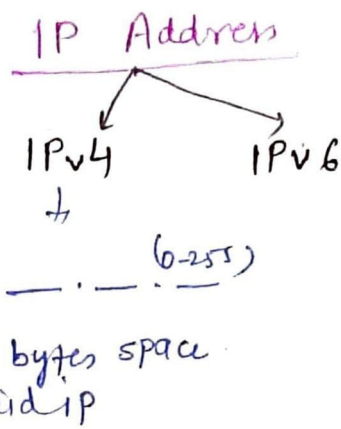
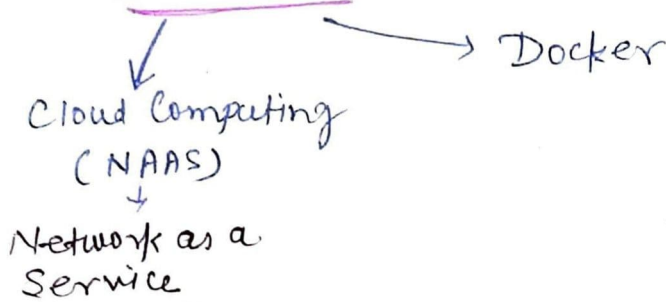


Session → 19

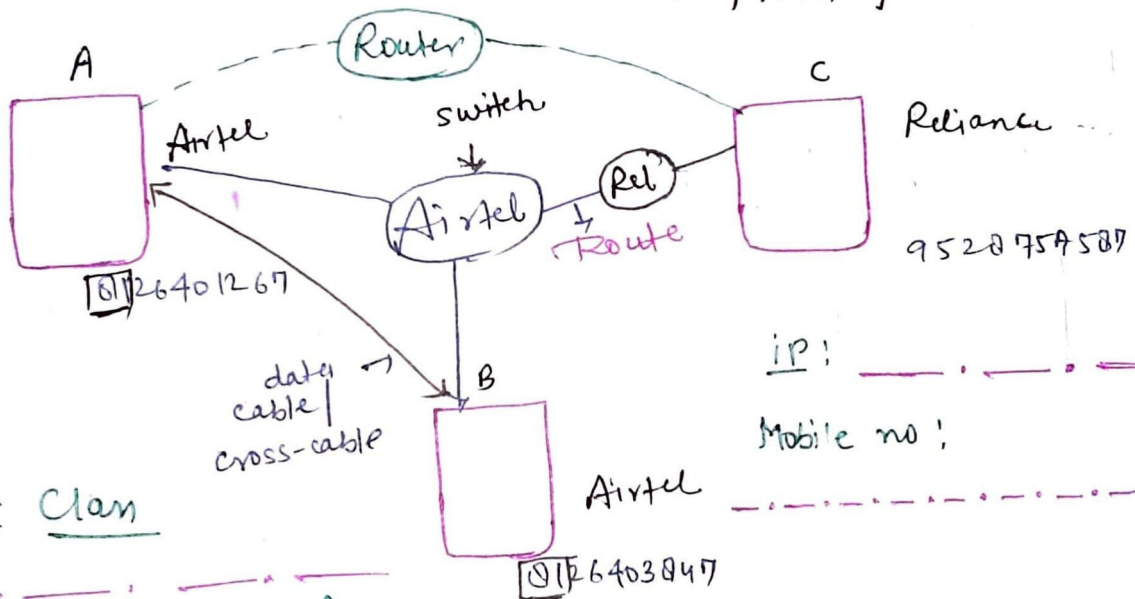
Linux N/w



Some basic requirement for N/w

- ① → OS
- ② → NIC / LAN / Ethernet
- ③ → IPv4 → 4 bytes

- ④ (IP) → A
↳ N/w
- ⑤ (IP) → B
↳ N/w
- ⑥ Physical connectivity.
- ⑦ IP → Public }
↳ Private }



N/w Clan

- 1-126 clan A
- 128-191 clan B
- 192-223 clan C
- 224-239 clan D
- 240-255 clan E

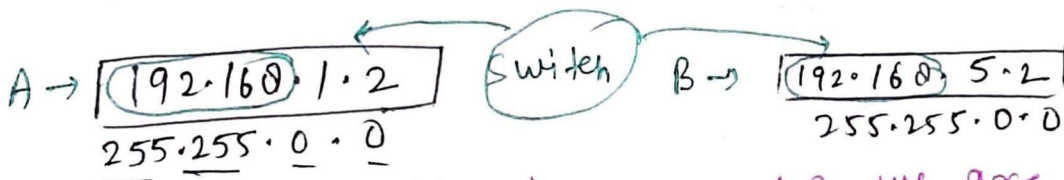
For finding your N/w name,

→ Netmask

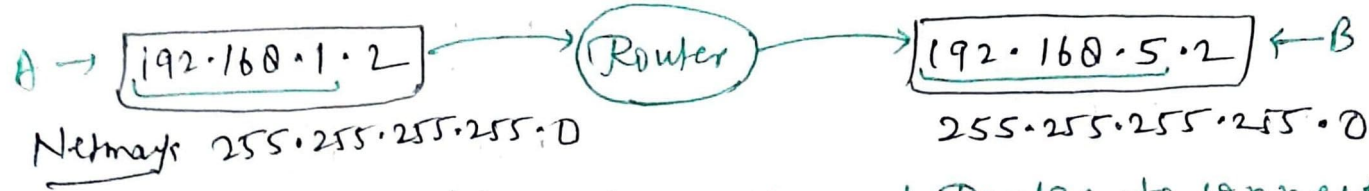
↳ it always come with ip address
↳ ifconfig enp0s3

192.168.43.9 netmask 255.255.255.0

so here N/w name is 192.168



here N/w is same so we are using switch



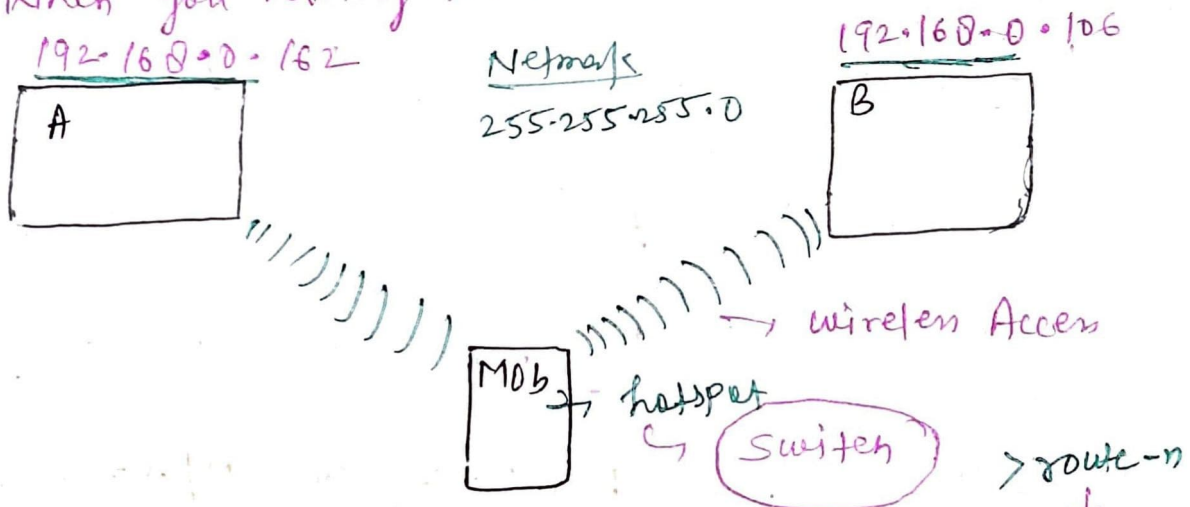
here, N/w is different so we need Router to connect each other instead of switch

ex. $192.168.1.2 \leftarrow IP$ $255.255.255.0 \leftarrow \text{Netmask}$ $\rightarrow \text{convert into Binary like}$
 Decimal notation form
 if you can directly find N/w name with IP & Netmask for N/w Name
 IP $\rightarrow 110000000 \dots$
 $\rightarrow 11111111 \dots$
 $\leftarrow 110000000 \dots$

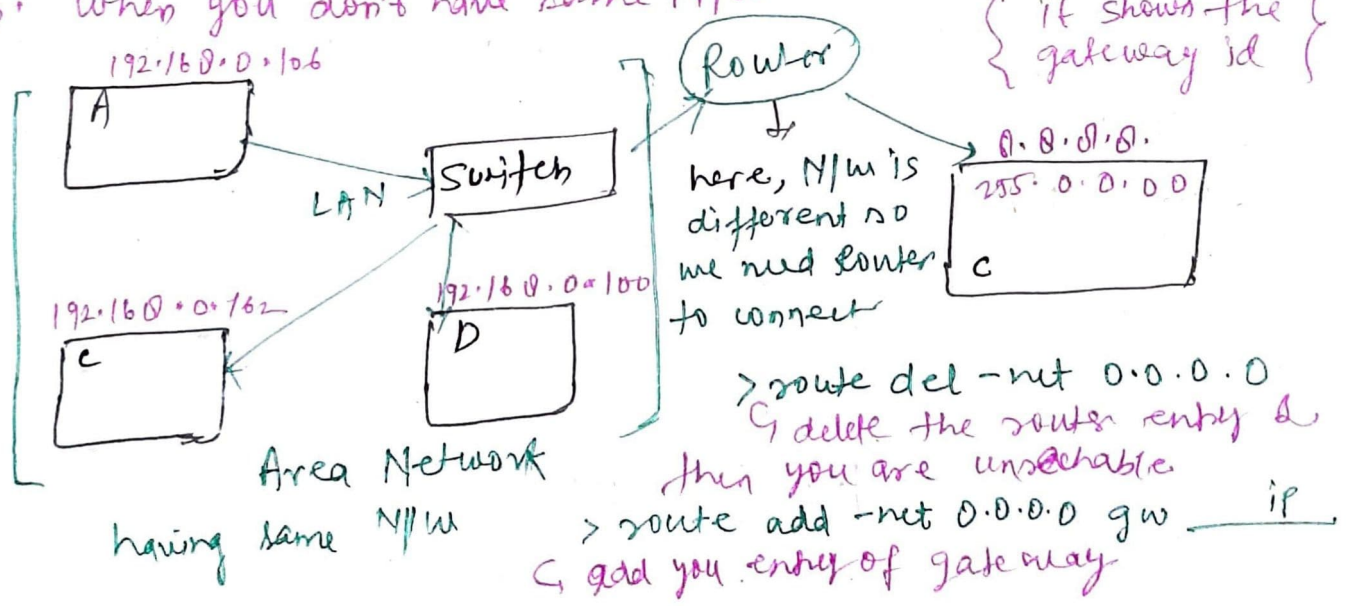
$\rightarrow /24 \rightarrow \text{Prefix length / CIDR}$ $\leftarrow \text{format of Netmask}$
 \downarrow
 $255.255.255.255 \rightarrow \text{Decimal form of Netmask}$
 $\overline{10} \quad \overline{10} \quad \overline{10} \quad \overline{10}$

Networking Diagram

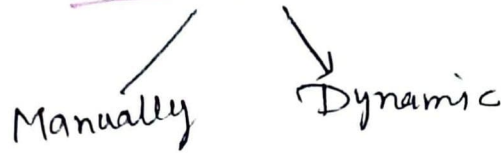
a. When you having the same N/w



b. When you don't have same N/w



N/W Configuration



For Manually Conf

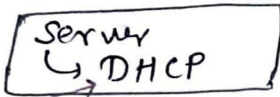
> ifconfig enpos3

ip

netmask netmask, id

ex - 255.255. - -

For Dynamic / Auto



hotspot
work like DHCP
Server