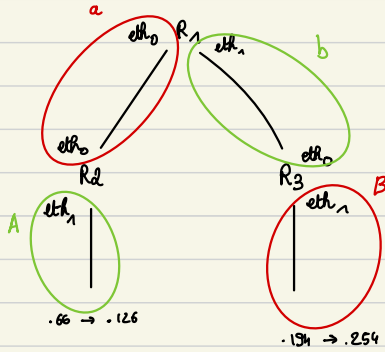


## exercice 1 : Réseau hiérarchique.

Q1.



$R1 \text{ eth}_0 \rightarrow 211.230.193.1$   
 $R2 \text{ eth}_0 \rightarrow 211.230.193.2$   
 $R2 \text{ eth}_1 \rightarrow 211.230.193.65$   
 $R1 \text{ eth}_1 \rightarrow 211.230.193.129$   
 $R3 \text{ eth}_0 \rightarrow 211.230.193.130$   
 $R3 \text{ eth}_1 \rightarrow 211.230.193.193$

IPv4 : 211.230.193.0/24

↳ a	.0/26	} 4 sous-réseaux
↳ A	.64/26	
↳ b	.128/26	
↳ B	.192/26	

IPv6 : 2001:db8:122:300::/56

↳ a	~~~~~	:0300::/58
↳ A	~~~~~	:0340::/58
↳ b	~~~~~	:0380::/58
↳ B	~~~~~	:03c0::/58

```

Q2.  sudo ip link set dev <eth> up
      sudo ip address add <@IPv4 / masque> dev <dev local>
      sudo ip route add <@RSX / masque> via @IPv4 dev eth_x
    
```

Machine du RSX A : (une seule interface eth0)

```

ip a add 211.230.193.66/26 dev eth0
ip r add 0.0.0.0/0 via 211.230.193.65 dev eth0
    
```

Config R2 :

```

ip a add 211.230.193.2/26 dev eth0
      211.230.193.65/26 dev eth1
    
```

```

ip r add /128/26 via 211.230.193.1
      /192/26 via 211.230.193.1 dev eth0
    
```

→ ip r add 211.230.193.128/25 via 211.230.193.1 dev eth0

### Router R2

ip a add ~ .1 /26 dev eth<sub>0</sub>

ip a add ~ .129 /26 dev eth<sub>1</sub>

ip r add 211.230.193.64 /26 via 211.230.193.2 dev eth<sub>0</sub>

ip r add ~ .192 /26 via 211.230.193.2 dev eth<sub>1</sub>

ip r add default via 211.230.193.1 dev eth<sub>2</sub>

### Table R1 :

211.230.193.0 /26	eth <sub>0</sub>	—
211.230.193.128 /26	eth <sub>1</sub>	—
211.230.193.64 /26	eth <sub>0</sub>	211.230.193.2
211.230.193.192 /26	eth <sub>1</sub>	211.230.193.130
0.0.0.0 /0	eth <sub>2</sub>	@ IP d'un GW