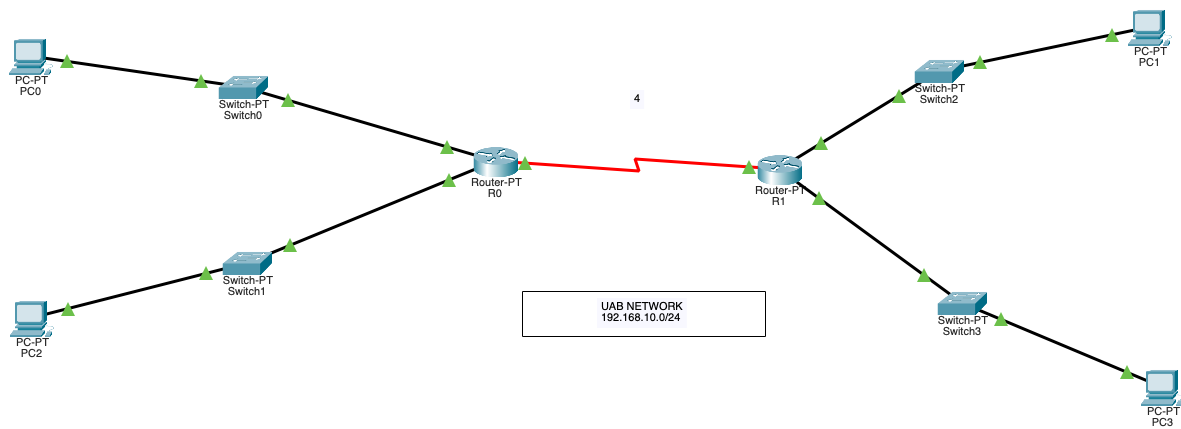Shreyas Srinivasa
BlazerID: ssriniva

1. You will need 5 subnets
2. You must borrow 3 bits
3. You will get 8 subnets
4. You will get 30 addresses
5. NET 1: 192.168.10.00100000
    a. NET 2: 192.168.10.01000000
    b. NET 3: 192.168.10.01100000
    c. NET 4: 192.168.10.10000000
6. Binary: 11111111.11111111.11111111.11100000
    a. Decimal: 255.255.255.224

subnetNumber	Subnet Address	First usable host	Last usable host	Broadcast Addresss
0	192.168.10.0	192.168.10.1	192.168.10.30	192.168.10.31
1	192.168.10.32	192.168.10.33	192.168.10.62	192.168.10.63
2	192.168.10.64	192.168.10.65	192.168.10.94	192.168.10.95
3	192.168.10.96	192.168.10.97	192.168.10.126	192.168.10.127
4	192.168.10.128	192.168.10.129	192.168.10.158	192.168.10.159
5	192.168.10.160	192.168.10.161	192.168.10.190	192.168.10.191

Step 2:

Assign Subnet 0 : 192.168.10.0
Assign Subnet 1 : 192.168.10.32
Assign Subnet 2 : 192.168.10.64
Assign Subnet 3 : 192.168.10.96
Assign Subnet 4 : 192.168.10.128

PC0 — PC-PT
Switch0 — Switch-PT
PC2 — PC-PT
Switch1 — Switch-PT
Router-PT R0
4
UAB NETWORK
192.168.10.0/24
Router-PT R1
PC1 — PC-PT
Switch2 — Switch-PT
Switch3 — Switch-PT
PC3 — PC-PT

Above is the picture of the subnetting setup.