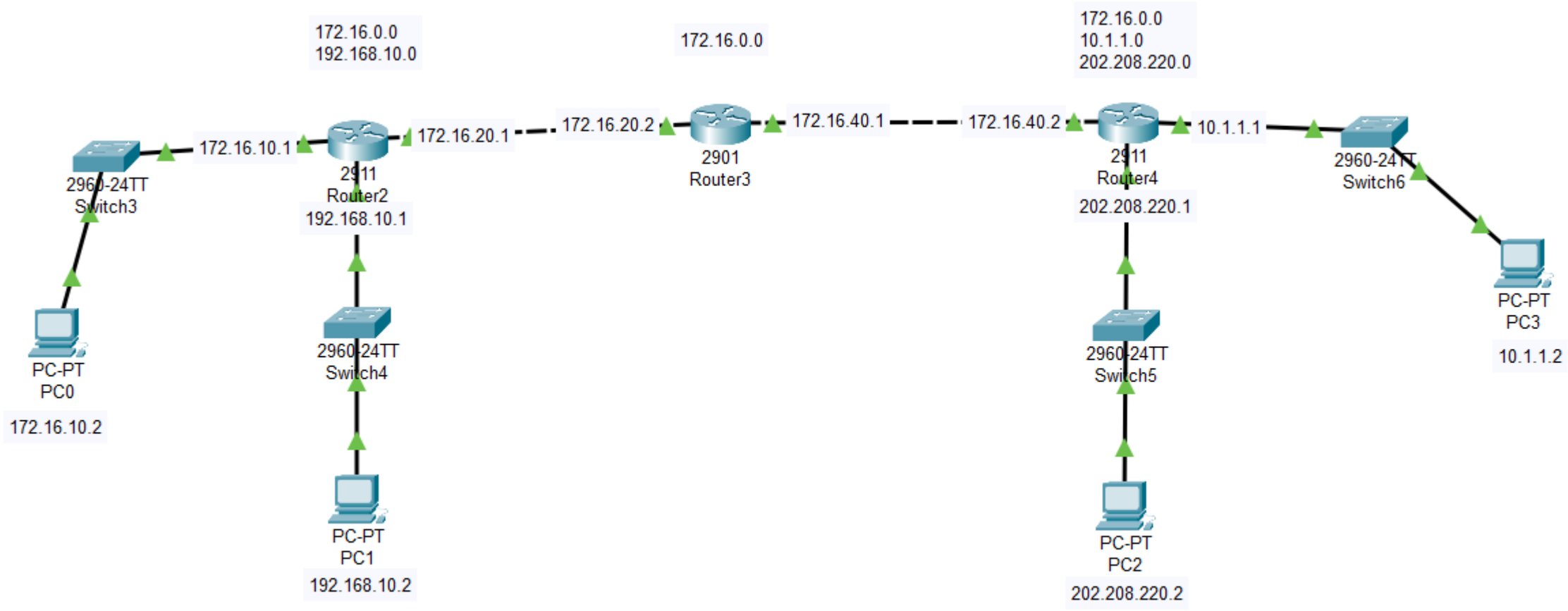
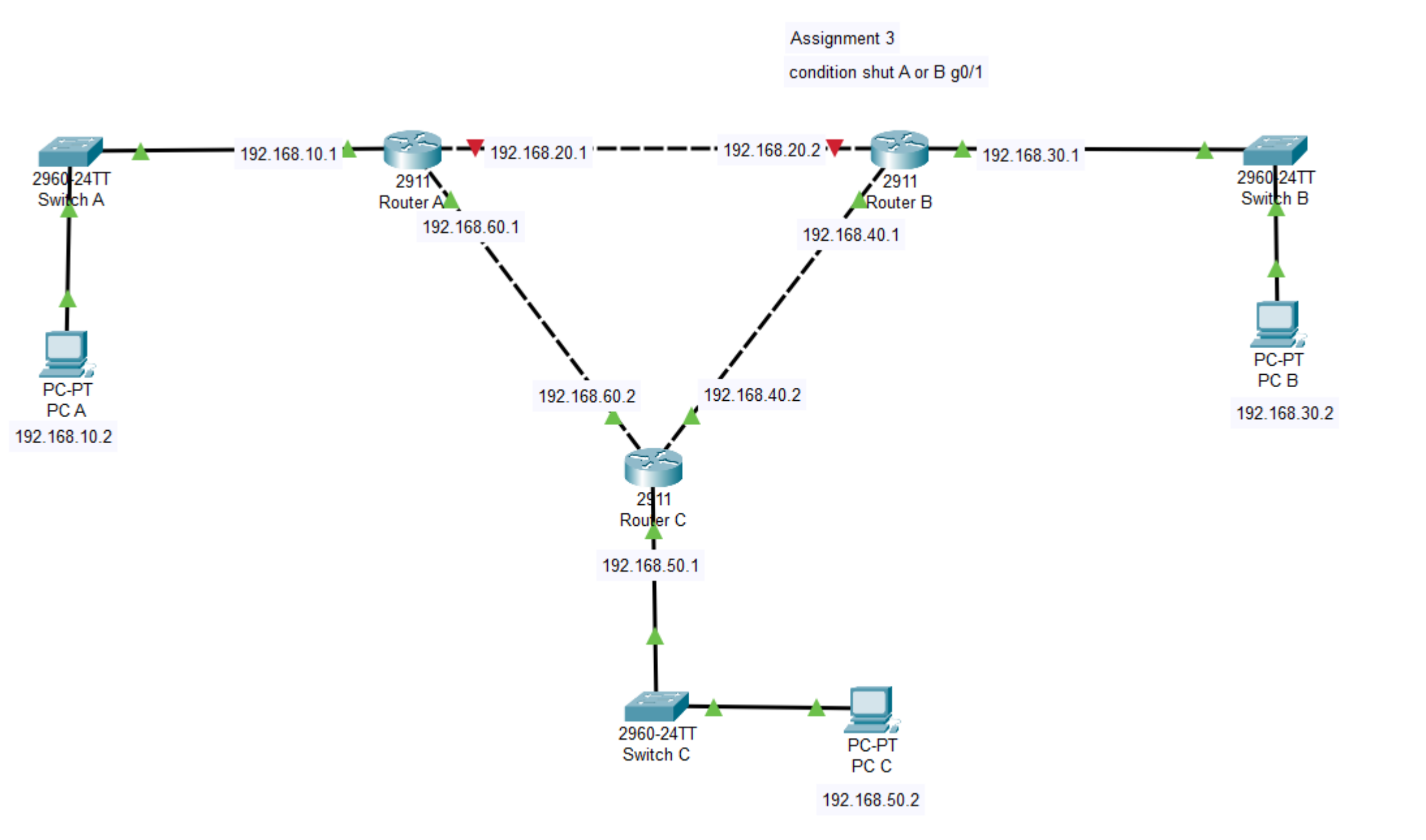
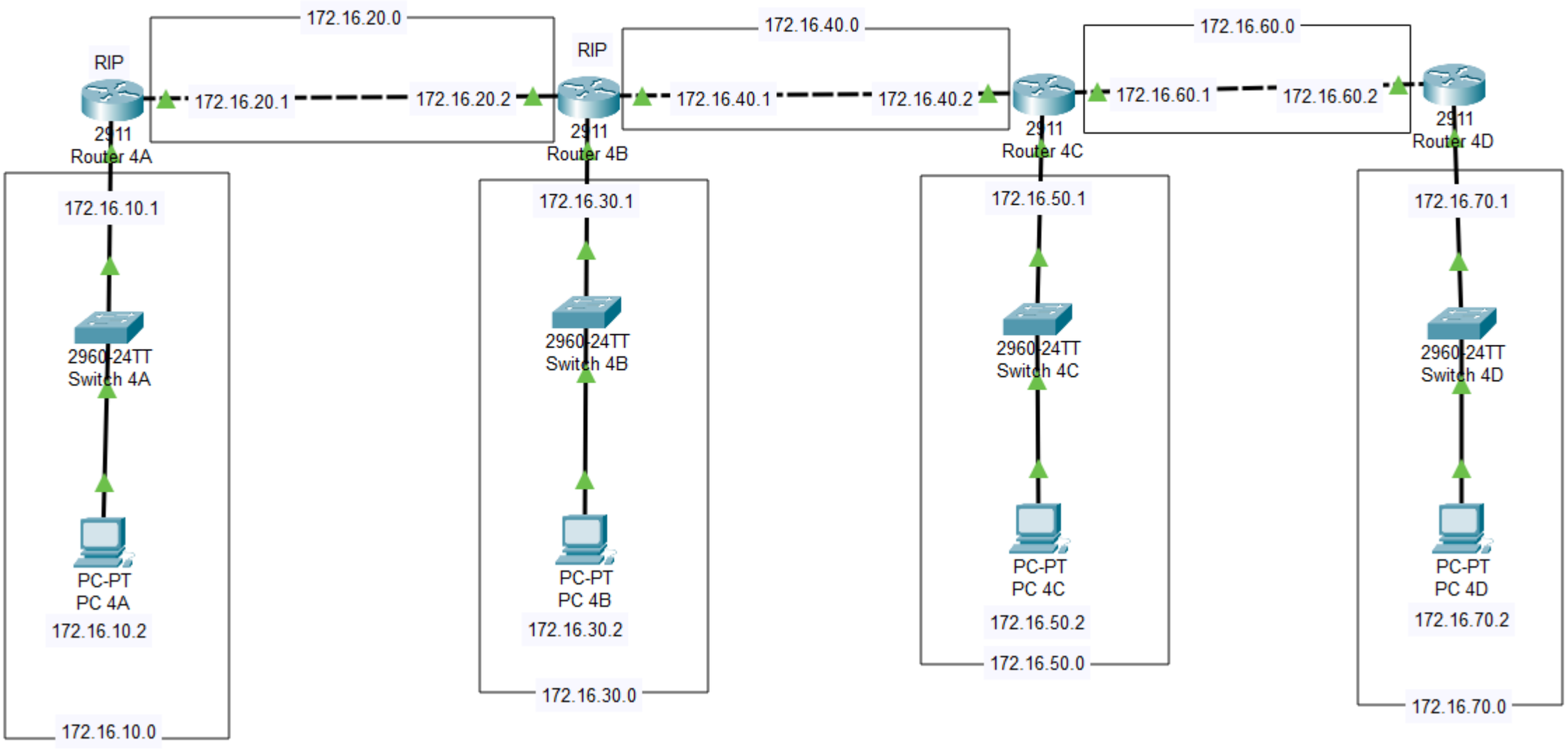

172.16.0.0
192.168.10.0
172.16.0.0
172.16.0.0
10.1.1.0
202.208.220.0
172.16.10.1
172.16.20.1
172.16.20.2
172.16.40.1
172.16.40.2
10.1.1.1
2960-24TT
Switch3
2911
Router2
192.168.10.1
2901
Router3
2911
Router4
202.208.220.1
2960-24TT
Switch6
PC-PT
PC0
172.16.10.2
2960-24TT
Switch4
PC-PT
PC1
192.168.10.2
2960-24TT
Switch5
PC-PT
PC2
202.208.220.2
PC-PT
PC3
10.1.1.2


Assignment 3
condition shut A or B g0/1
2960-24TT
Switch A
192.168.10.1
2911
Router A
192.168.20.1
192.168.20.2
2911
Router B
192.168.30.1
2960-24TT
Switch B
192.168.60.1
192.168.40.1
PC-PT
PC A
192.168.10.2
PC-PT
PC B
192.168.30.2
192.168.60.2
192.168.40.2
2911
Router C
192.168.50.1
2960-24TT
Switch C
PC-PT
PC C
192.168.50.2

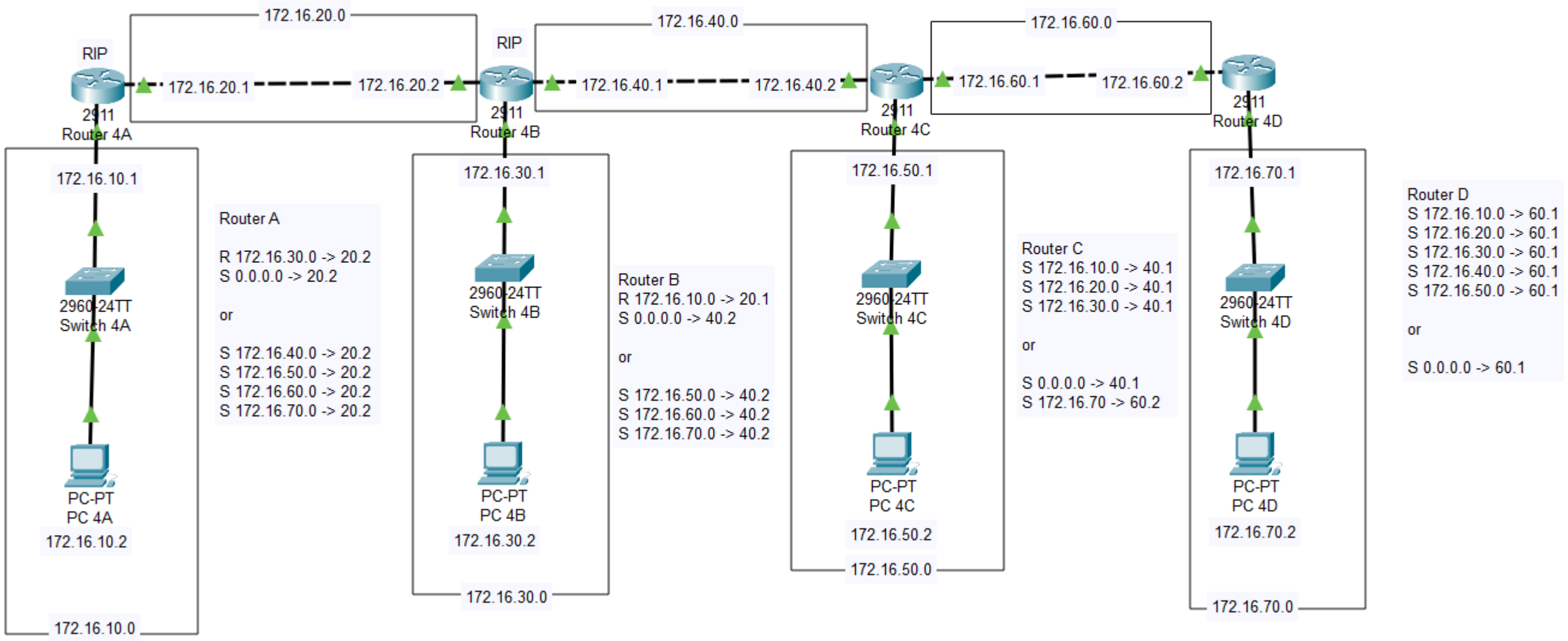
Assignment 4

Condition : -
Router A & B should be Implement with RIP
and all PC's should communicate with each other



Assignment 4

Condition : -
Router A & B should be Implement with RIP
and all PC's should communicate with each other



Router A

R 172.16.30.0 -> 20.2
S 0.0.0.0 -> 20.2

or

S 172.16.40.0 -> 20.2
S 172.16.50.0 -> 20.2
S 172.16.60.0 -> 20.2
S 172.16.70.0 -> 20.2

Router B
R 172.16.10.0 -> 20.1
S 0.0.0.0 -> 40.2

or

S 172.16.50.0 -> 40.2
S 172.16.60.0 -> 40.2
S 172.16.70.0 -> 40.2

Router C
S 172.16.10.0 -> 40.1
S 172.16.20.0 -> 40.1
S 172.16.30.0 -> 40.1

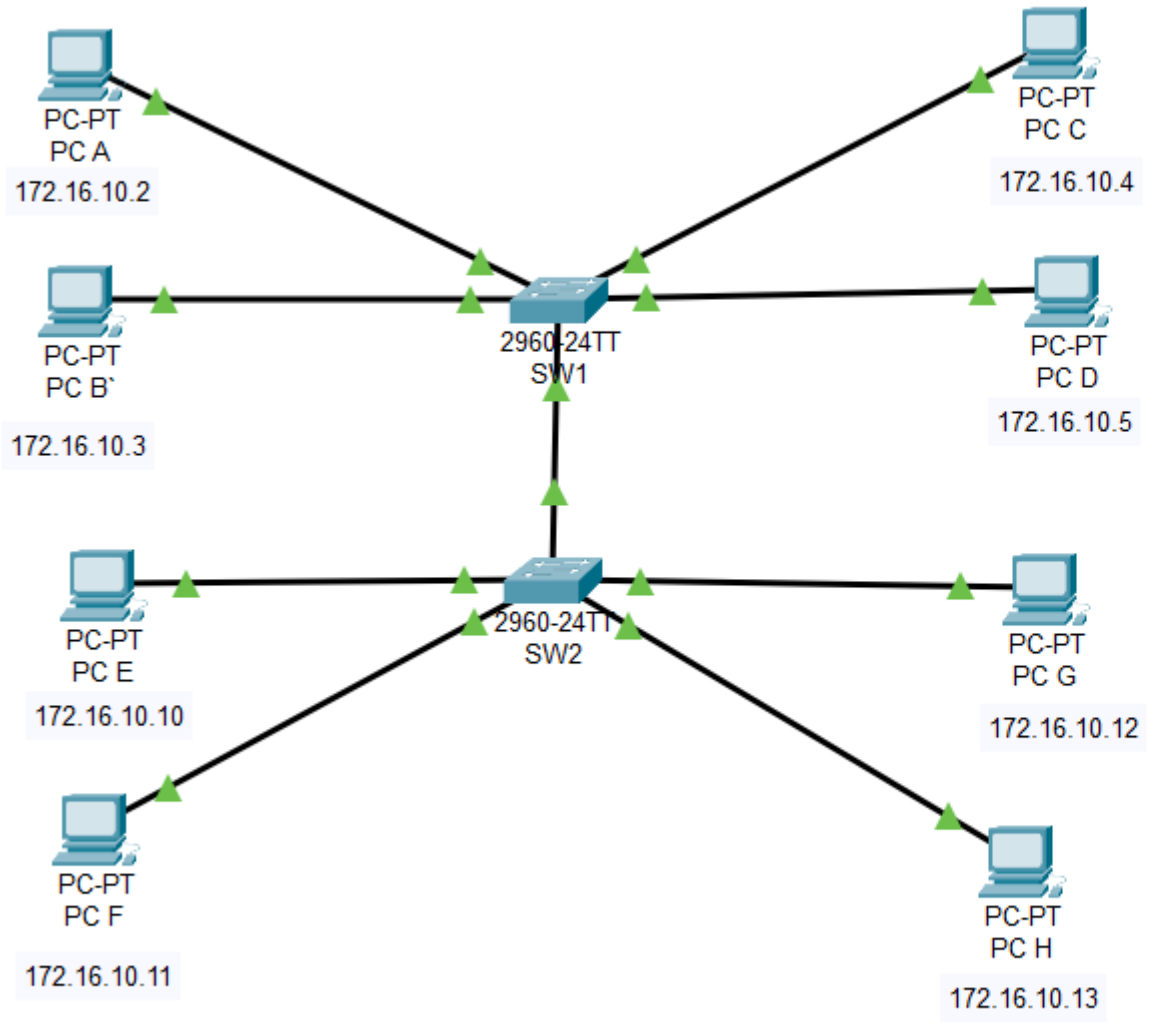
or

S 0.0.0.0 -> 40.1
S 172.16.70 -> 60.2

Router D
S 172.16.10.0 -> 60.1
S 172.16.20.0 -> 60.1
S 172.16.30.0 -> 60.1
S 172.16.40.0 -> 60.1
S 172.16.50.0 -> 60.1

or

S 0.0.0.0 -> 60.1



2 --> sales
3 --> purchase

/24

Hosname SW1
Enable secret
user mode password
IP(172.16.10.100) and SM and DG (172.16.10.1) on the switch
create the vlans and add ports to vlans

2 --> sales
3 --> purchase

/24

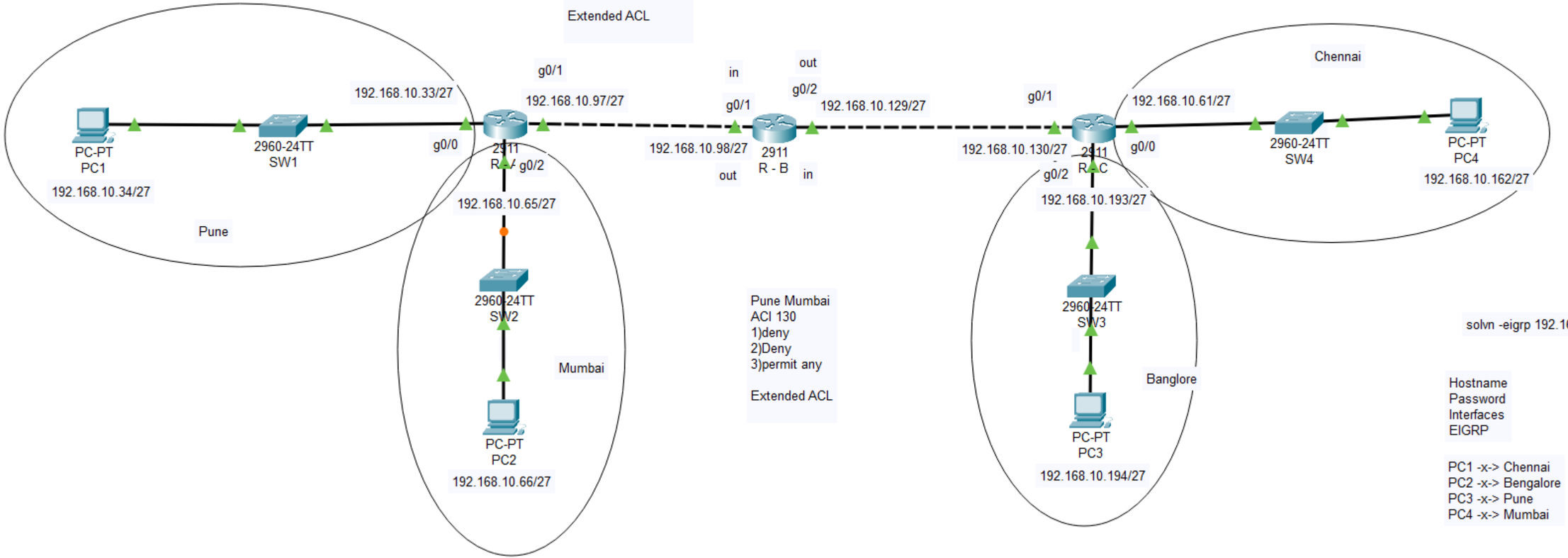
Hosname SW2
Enable secret
user mode password
IP(172.16.10.200) and SM and DG (172.16.10.1) on the switch
create the vlans and add ports to vlans

PC4 172.16.50.2

Chennai Benglore
----------Direction----->
ACI 120
1)deny
2)Deny
3)permit any

Extended ACL

for every direction create new access list



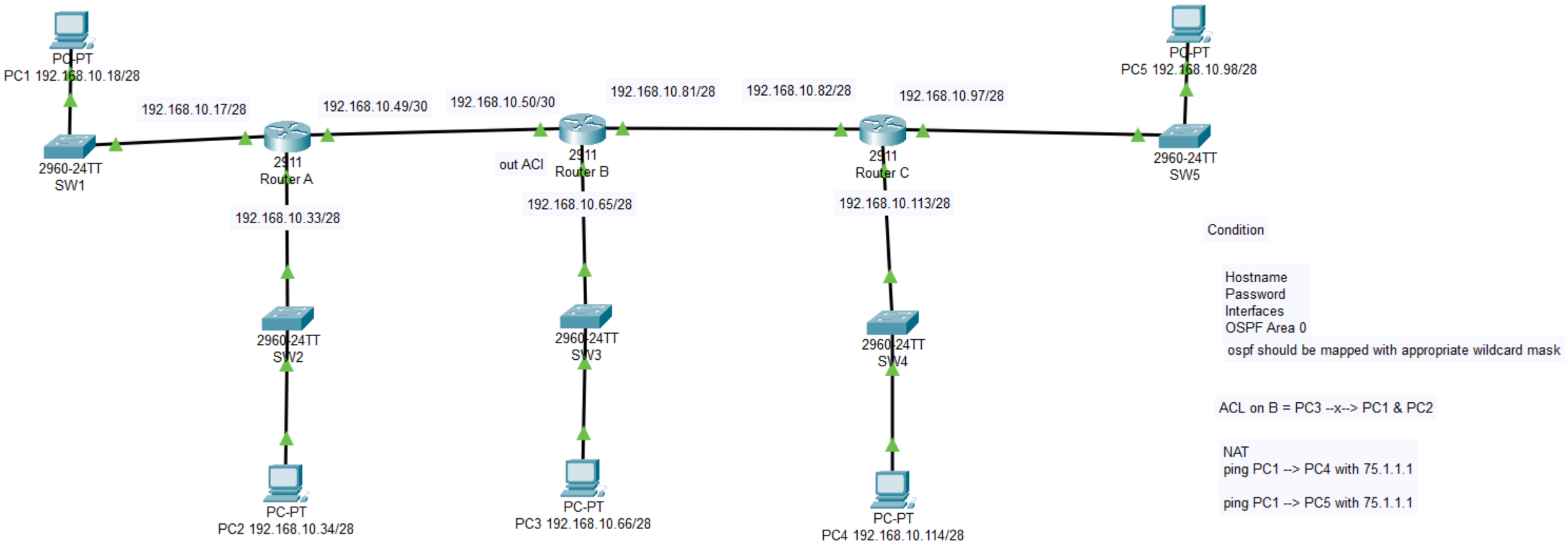
Pune Mumbai
ACI 130
1)deny
2)Deny
3)permit any

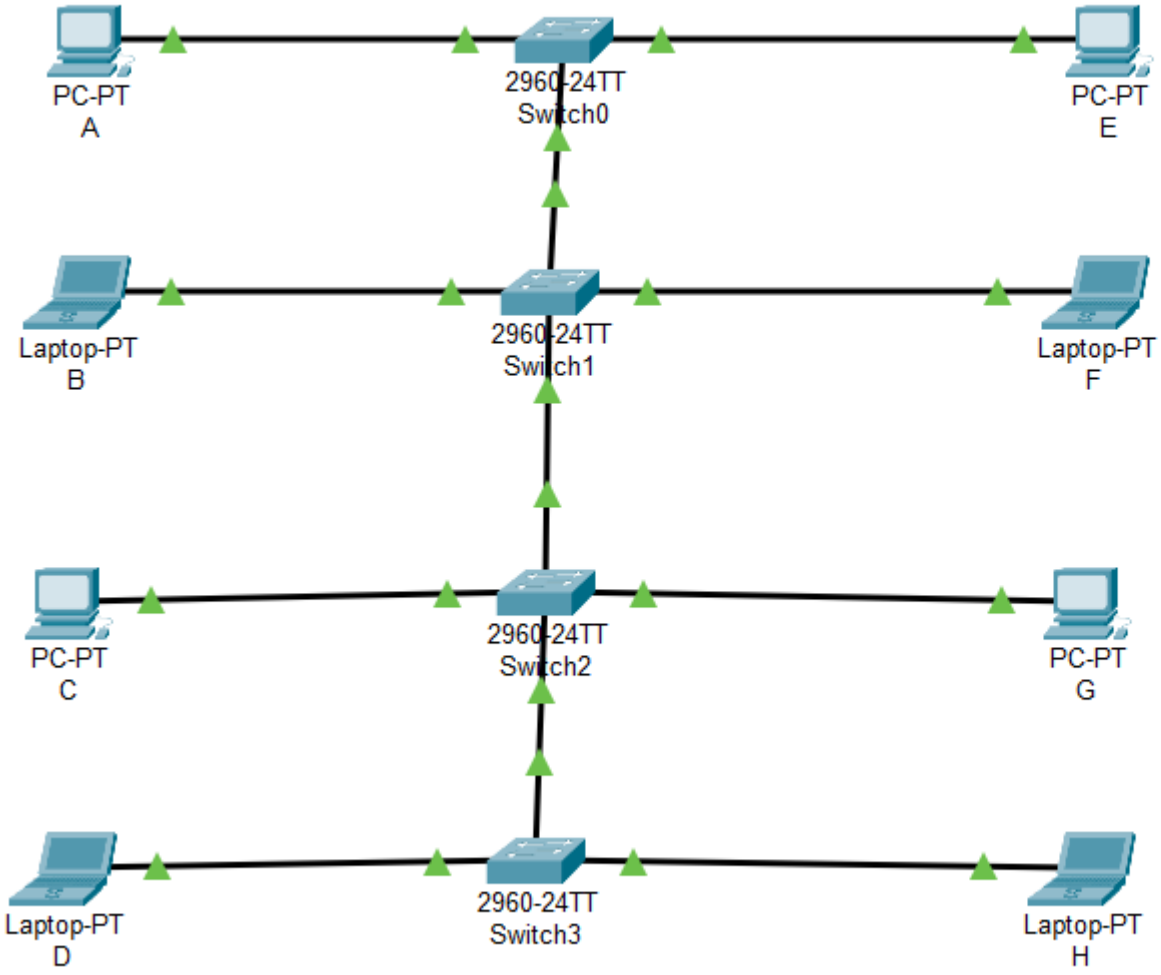
Extended ACL

solvn -eigrp 192.168.10.0 on all router

Hostname
Password
Interfaces
EIGRP

PC1 -x-> Chennai
PC2 -x-> Bengalore
PC3 -x-> Pune
PC4 -x-> Mumbai

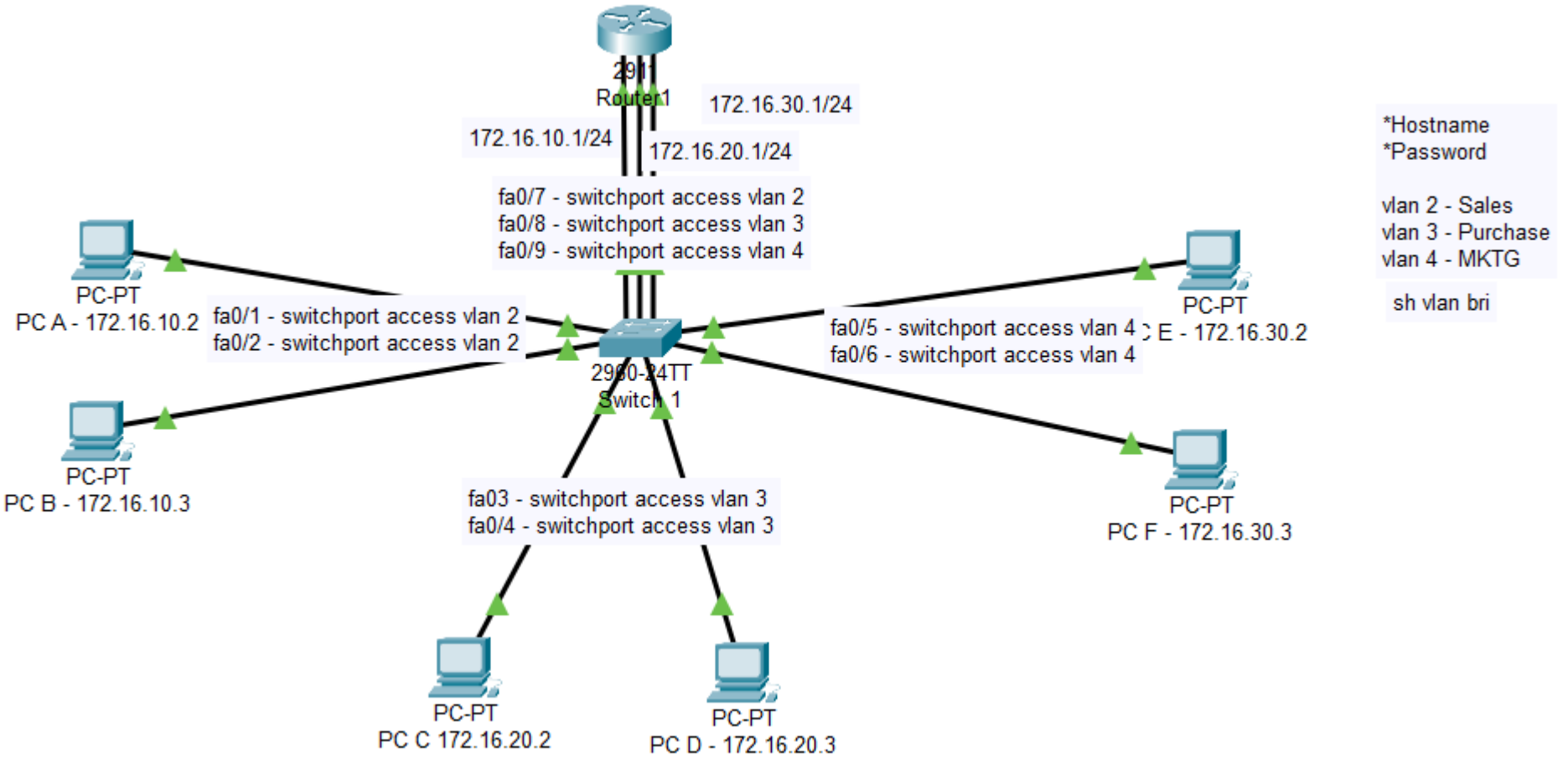

PC-PT
PC1 192.168.10.18/28
192.168.10.17/28
2960-24TT
SW1
2911
Router A
192.168.10.49/30
192.168.10.50/30
out ACl
2911
Router B
192.168.10.81/28
192.168.10.82/28
2911
Router C
192.168.10.97/28
PC-PT
PC5 192.168.10.98/28
2960-24TT
SW5
192.168.10.33/28
2960-24TT
SW2
PC-PT
PC2 192.168.10.34/28
192.168.10.65/28
2960-24TT
SW3
PC-PT
PC3 192.168.10.66/28
192.168.10.113/28
2960-24TT
SW4
PC-PT
PC4 192.168.10.114/28
Condition
Hostname
Password
Interfaces
OSPF Area 0
ospf should be mapped with appropriate wildcard mask
ACL on B = PC3 --x--> PC1 & PC2
NAT
ping PC1 --> PC4 with 75.1.1.1
ping PC1 --> PC5 with 75.1.1.1

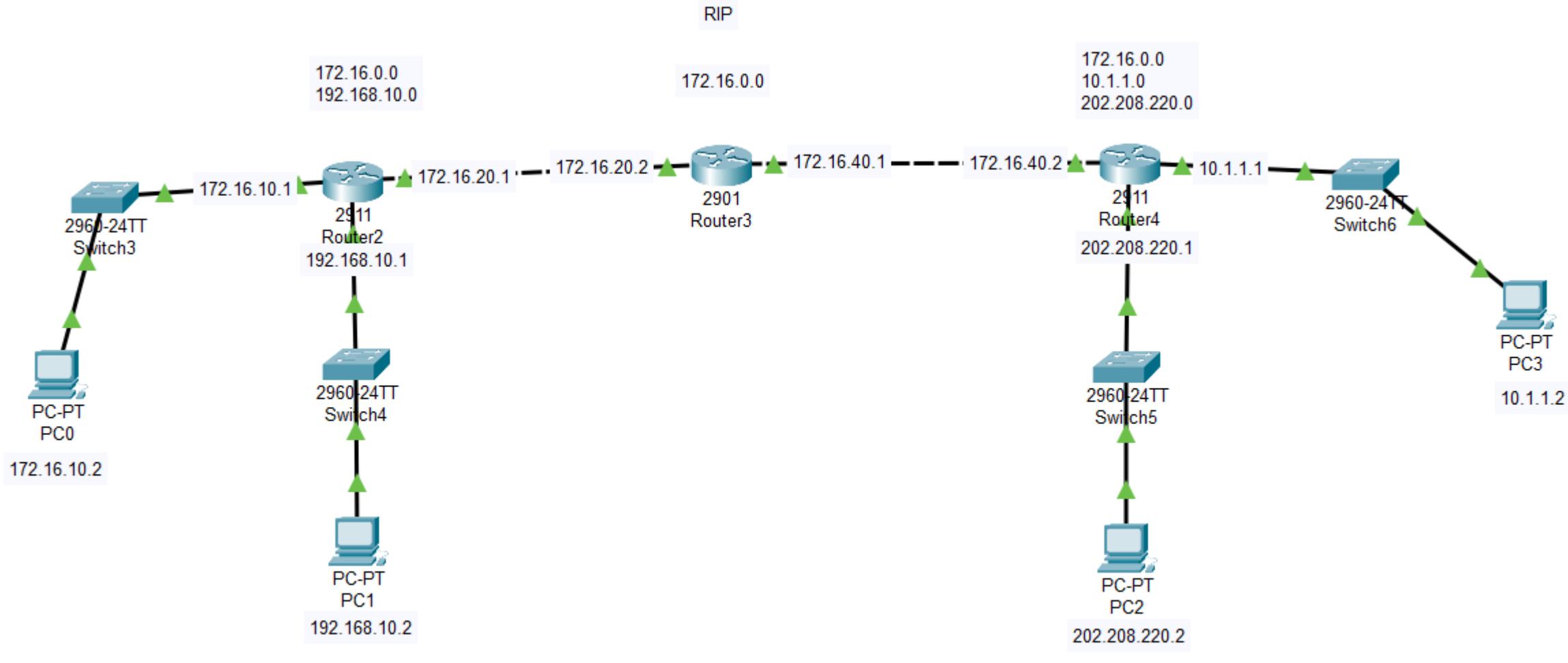



```
SW1(config)#vtp domain sunbeam
vtp mode server
vlan 2
-vlan)#name sales
vlan 3
-vlan)#name purchase
(conf)#int f1/0
if)#switchport access vlan 2
#int f1/1
switchport access vlan 3
int fa1/12
-if)# switchport modetrunk
```

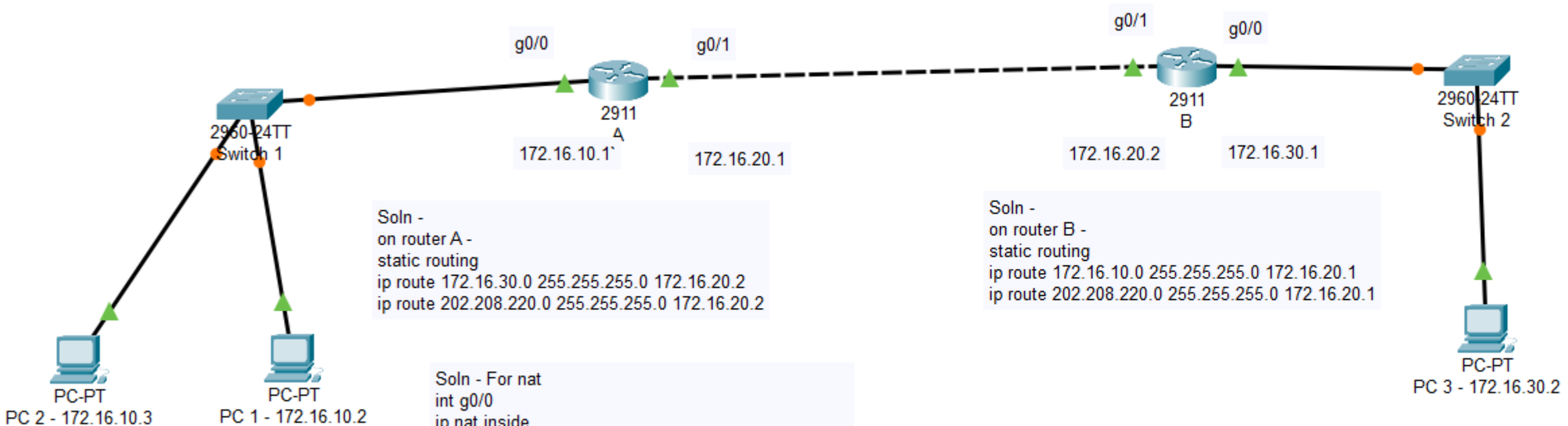
```
SW2(config)#vtp domain sunbeam
vtp mode client
(conf)#int f1/0
if)#switchport access vlan 2
#int f1/1
switchport access vlan 3
int fa1/12
-if)# switchport modetrunk
```

```
SW3(config)#vtp domain sunbeam
vtp mode client
(conf)#int f1/0
if)#switchport access vlan 2
#int f1/1
switchport access vlan 3
int fa1/12
-if)# switchport modetrunk
#fa1/13
-if)switchport mode trunk
```


2911
Router1
172.16.30.1/24
172.16.10.1/24
172.16.20.1/24
fa0/7 - switchport access vlan 2
fa0/8 - switchport access vlan 3
fa0/9 - switchport access vlan 4
PC-PT
PC A - 172.16.10.2
fa0/1 - switchport access vlan 2
fa0/2 - switchport access vlan 2
2960-24TT
Switch 1
fa0/5 - switchport access vlan 4
fa0/6 - switchport access vlan 4
PC-PT
E - 172.16.30.2
PC-PT
PC B - 172.16.10.3
fa03 - switchport access vlan 3
fa0/4 - switchport access vlan 3
PC-PT
PC F - 172.16.30.3
PC-PT
PC C 172.16.20.2
PC-PT
PC D - 172.16.20.3
*Hostname
*Password
vlan 2 - Sales
vlan 3 - Purchase
vlan 4 - MKTG
sh vlan bri


RIP
172.16.0.0
192.168.10.0
172.16.0.0
172.16.0.0
10.1.1.0
202.208.220.0
172.16.10.1
172.16.20.1
172.16.20.2
172.16.40.1
172.16.40.2
10.1.1.1
2960-24TT
Switch3
2911
Router2
192.168.10.1
2901
Router3
2911
Router4
202.208.220.1
2960-24TT
Switch6
PC-PT
PC0
172.16.10.2
2960-24TT
Switch4
2960-24TT
Switch5
PC-PT
PC3
10.1.1.2
PC-PT
PC1
192.168.10.2
PC-PT
PC2
202.208.220.2

NAT



Soln -
on router A -
static routing
ip route 172.16.30.0 255.255.255.0 172.16.20.2
ip route 202.208.220.0 255.255.255.0 172.16.20.2

Soln - For nat
int g0/0
ip nat inside

int g0/1
ip nat outside

ip nat inside source static 172.16.10.2 202.208.220.2
ip nat inside source static 172.16.10.2 202.208.220.2

Soln -
on router B -
static routing
ip route 172.16.10.0 255.255.255.0 172.16.20.1
ip route 202.208.220.0 255.255.255.0 172.16.20.1

Static NAT
Inside local -> Inside global

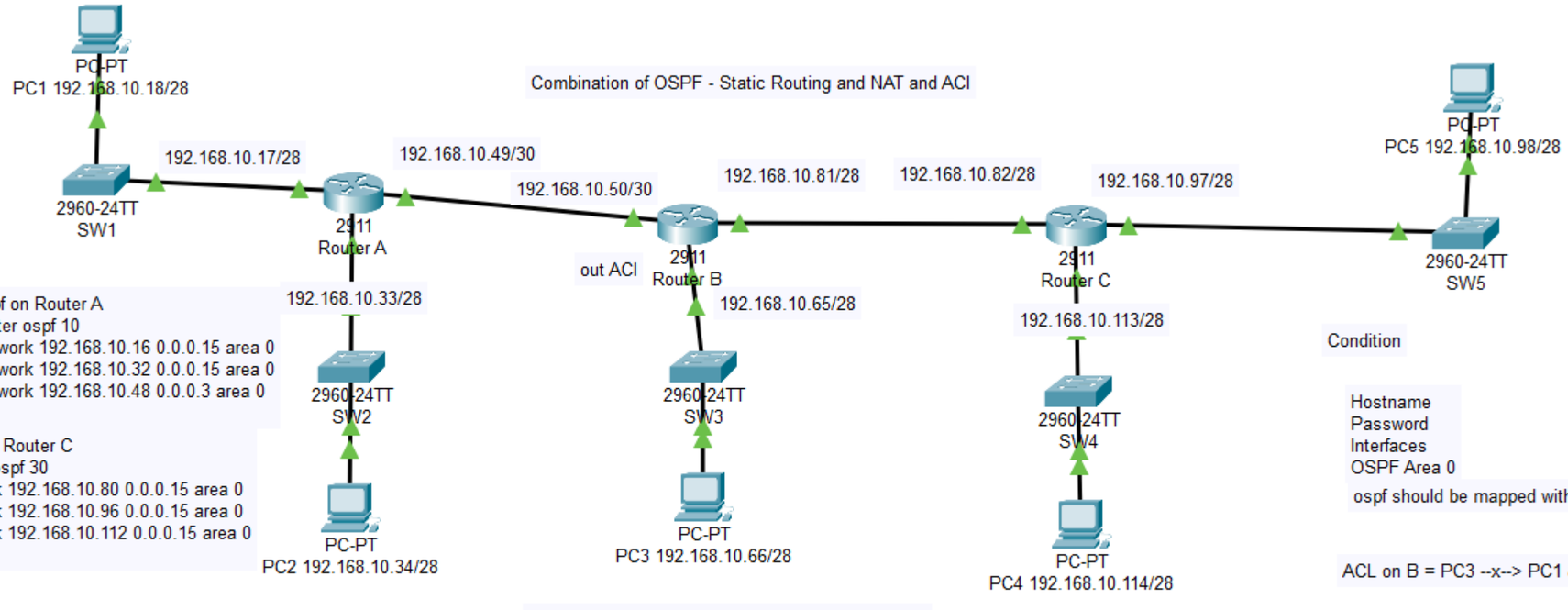
172.16.10.2 --> 202.208.220.2

172.16.10.3 --> 202.208.220.3

Config : -
1) Hostname
2) Password
3) Interfaces
4) Static Routes
5) NAT for PC2 & PC1

PC3 should ping to PC1 & PC2 with inside global

NATing has to be provided on Router A



Combination of OSPF - Static Routing and NAT and ACI

subnet 28 so gap is 16 ->
16 to 32
32 to 48
64 to 80
80 to 96
96 to 112

out ACI

ospf on Router B
router ospf 20
network 192.168.10.48 0.0.0.15 area 0
network 192.168.10.64 0.0.0.15 area 0
network 192.168.10.80 0.0.0.15 area 0

ospf on Router A
router ospf 10
network 192.168.10.16 0.0.0.15 area 0
network 192.168.10.32 0.0.0.15 area 0
network 192.168.10.48 0.0.0.3 area 0

ospf on Router C
router ospf 30
network 192.168.10.80 0.0.0.15 area 0
network 192.168.10.96 0.0.0.15 area 0
network 192.168.10.112 0.0.0.15 area 0

on router B for ACL = PC3 --x-->PC1 & PC2
access-list 101 deny ip 192.168.10.64 0.0.0.15 192.168.10.18 0.0.0.15

access-list 101 deny ip 192.168.10.64 0.0.0.15 192.168.10.34 0.0.0.15

int g0/2
ip access-group 101 out

For nat
int g0/2
ip nat outside
int g0/1
ip nat inside
int g0/0
ip nat inside
ip nat inside source static 192.168.10.98 75.1.1.1
ip nat inside source static 192.168.10.114 75.1.1.1

static
on A,B,C for nat

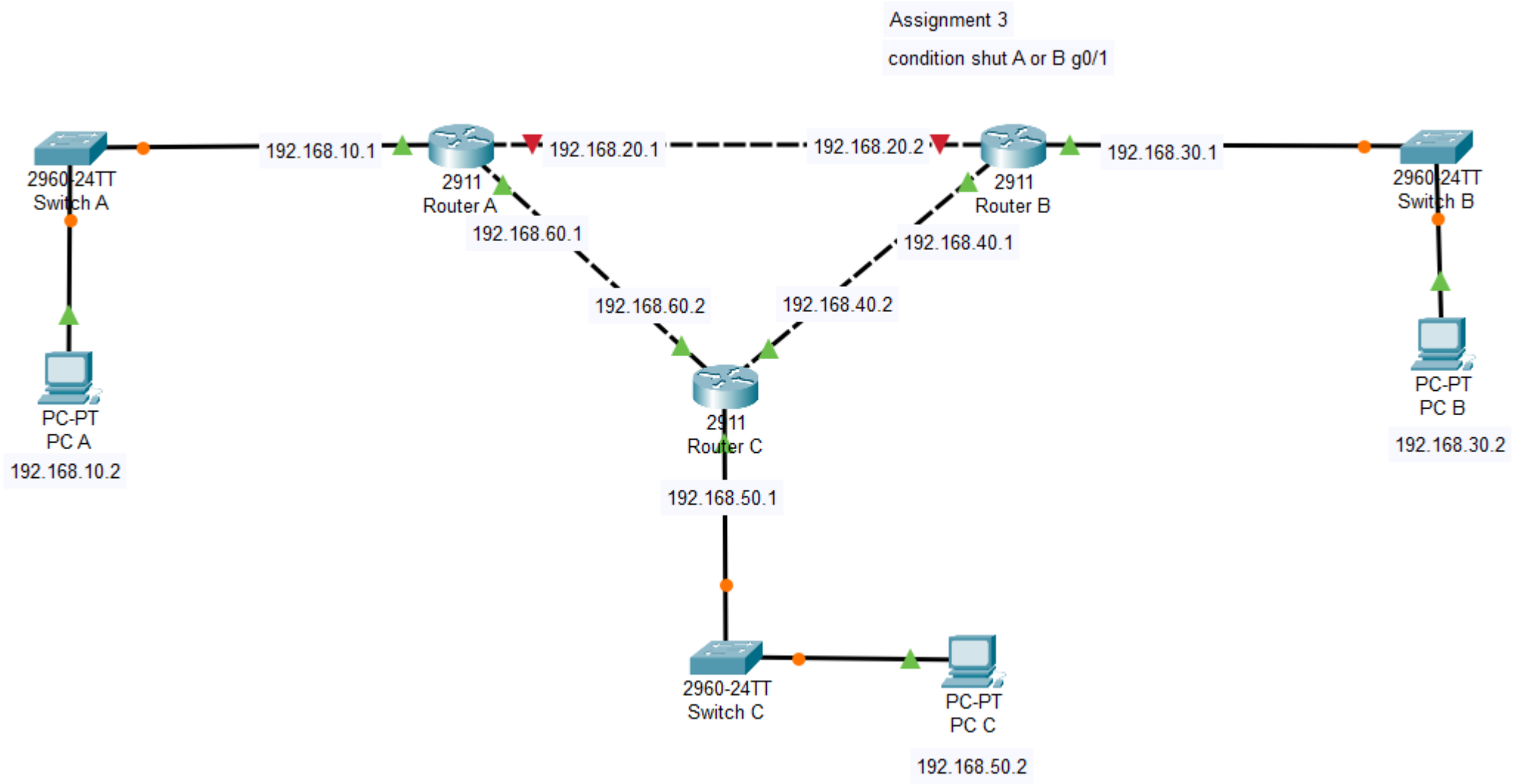
Condition

Hostname
Password
Interfaces
OSPF Area 0
ospf should be mapped with appropriate wildcard mask

ACL on B = PC3 --x--> PC1 & PC2

NAT
ping PC1 --> PC4 with 75.1.1.1

ping PC1 --> PC5 with 75.1.1.1


Assignment 3
condition shut A or B g0/1
2960-24TT
Switch A
192.168.10.1
2911
Router A
192.168.20.1
192.168.20.2
2911
Router B
192.168.30.1
2960-24TT
Switch B
192.168.60.1
192.168.40.1
192.168.60.2
192.168.40.2
PC-PT
PC A
192.168.10.2
2911
Router C
PC-PT
PC B
192.168.30.2
192.168.50.1
2960-24TT
Switch C
PC-PT
PC C
192.168.50.2