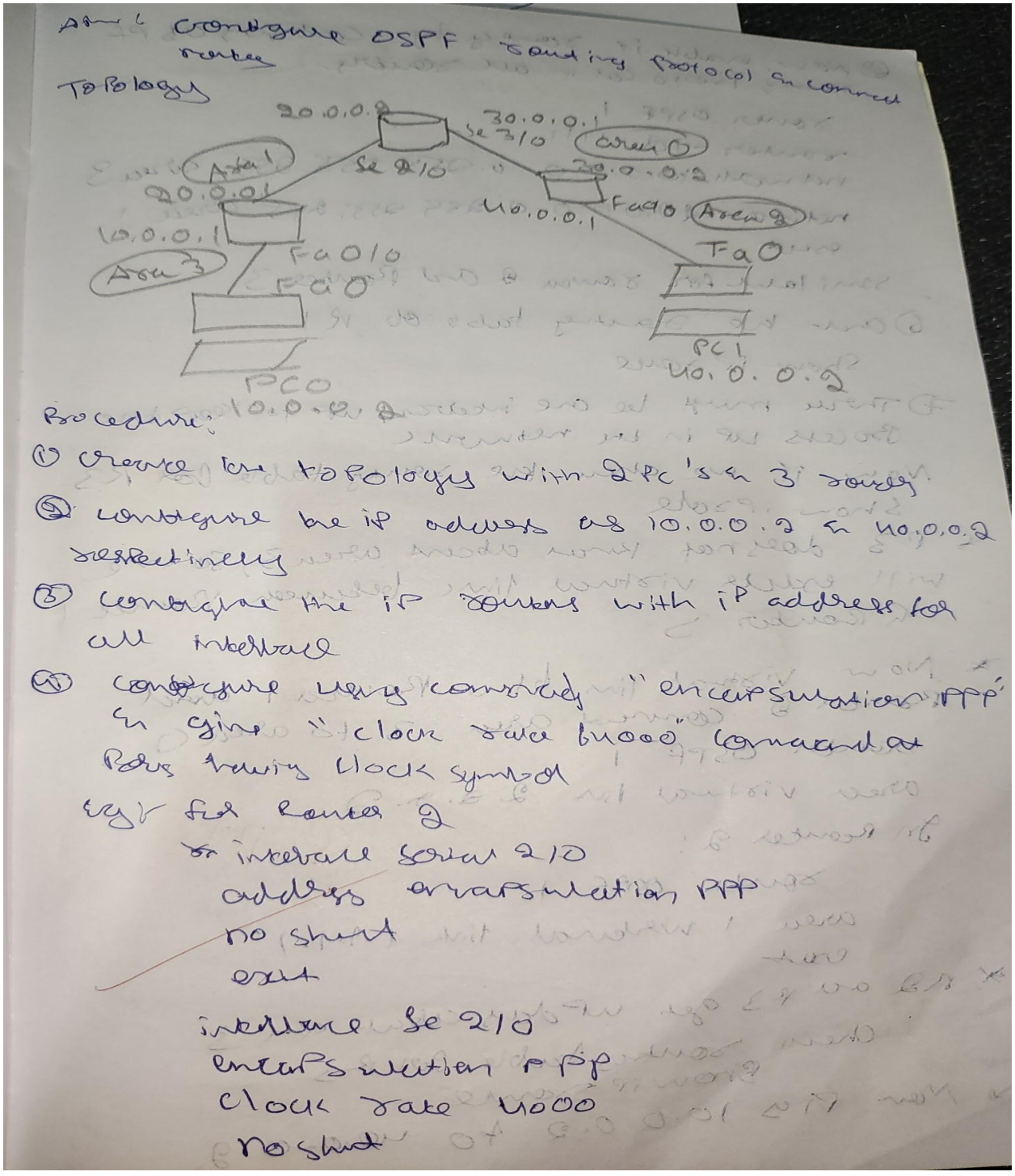
Configure OSPF routing protocol



5) Now, enable ip routing by configuring OSPF routing Protocol in all routers.

router ospf 1
router-id 1111
network 10.0.0.0 0.255.255.255 area 3
network 20.0.0.0 0.255.255.255 area 1
exit

Similarly for router 2 and Router 3

6) Check the routing table of R1

Show ip route

7) There must be one interface up to keep the BGP sessions up in the network

Now if we check the routing table for R3

Show ip route

* R3 doesn't know about area 3, so we will create virtual link between Router 1 & Router 3

* Now virtual link btw Router 1 and Router 2 connect area 3 to area 0

router OSPF 1
area 1 virtual link 2.2.2.2

In Router 2:

router OSPF 1
area 1 virtual link 1.1.1.1
exit

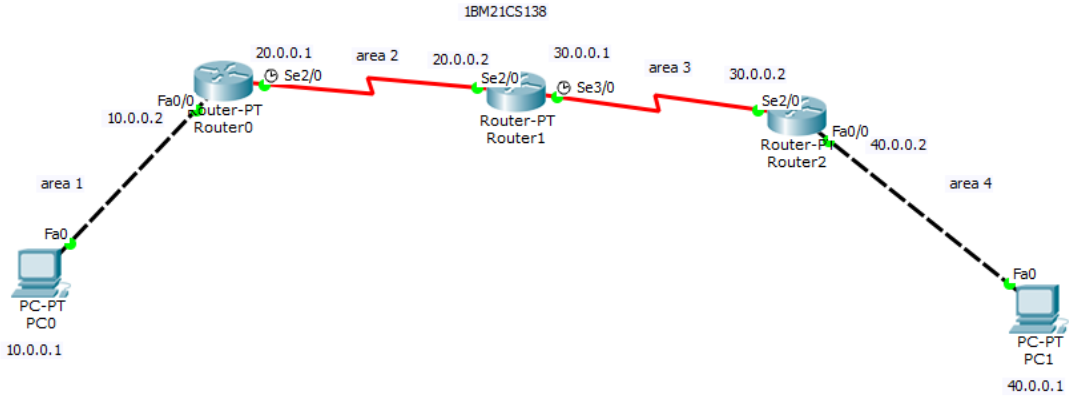
* R2 and R3 get updated about area 3

Check routing table for R3

Show ip route

* Now Ping 10.0.0.2 to 40.0.0.2

Topology:



Output: