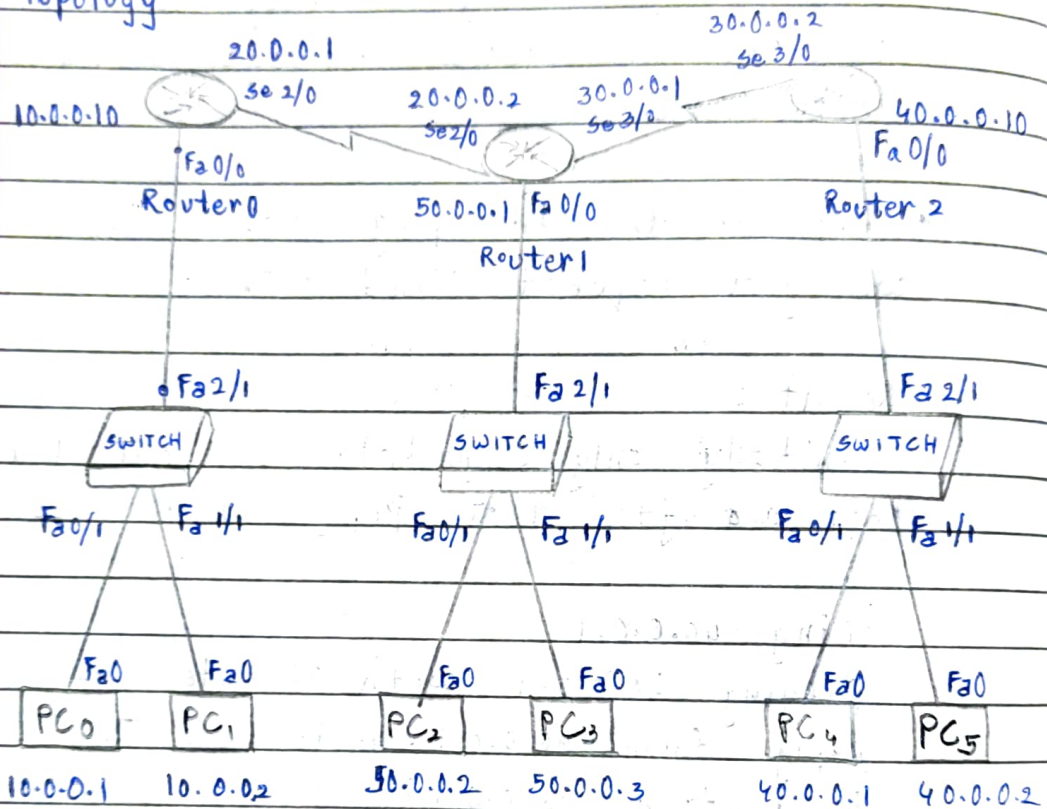


AIM: Configure default route to the routers

### Topology



### Procedure:

- 1) Add three routers, three switches and six PC's to the workspace
- 2) Configure all IP's of each PC's and also give gateways for all PC's. All connection between PC's and PC-switch and switch-Router are made using copper straight through. Connections between two routers are made using Serial DCE



3) After com this in the router0 go to CLI and then follow these commands

```
Router>enable
```

```
Router # config t
```

```
Router(config) # interface fa 0/0
```

```
Router(config-if) # ip address 10.0.0.10 255.0.0.0
```

```
Router(config-if) # no shut
```

```
Router(config-if) # exit
```

```
Router(config) # interface serial 2/0
```

```
Router(config-if) # ip address 20.0.0.1 255.0.0.0
```

```
Router(config-if) # no shut
```

```
Router(config-if) # exit
```

```
Router(config) # exit
```

```
Router # exit
```

```
Router>
```

4) Follow same commands for Both Router 2 and Router1, After performing all these operations on these routers all the lights will be turned green,

5) For Router0 and Router2 default routing can be done but for Router1 doesn't have any default routing & static routing is done for the Router1



## Observation:-

### Learning Outcome:-

- Router cannot have two default routing
- The default router for Router's first router is the middle router because any packets which have to be delivered will go to the middle router.
- Middle router doesn't have any default router because if one of the router is made default then there is a chance that the packets which are sent to the switch are sent to the router.
- Router1 is default Router for 3rd Router because packets will be delivered only to Router1.

### Result:-

Ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data

Request timed out

Reply from 40.0.0.1 : bytes = 32, Time = 4ms, TTL = 125

Reply from 40.0.0.1 : bytes = 32, Time = 2ms, TTL = 125

Reply from 40.0.0.1 : bytes = 32, Time = 2ms, TTL = 125

Ping statistics for 40.0.0.1:

Packets : Sent = 4, Received = 3, Lost = 1 (25% loss)





Approximate round trip time in milli-seconds:

Minimum = 2ms, Maximum = 23ms, Average = 9ms

Ping 40.0.0.1

Pinging 40.0.0.1 with 32 bytes of data:

Reply from 40.0.0.1 : bytes=32 time=3ms TTL=125

Reply from 40.0.0.1 : bytes=32 time=3ms TTL=125

Reply from 40.0.0.1 : bytes=32 time=8ms TTL=125

Reply from 40.0.0.1 : bytes=32 time=2ms TTL=125

Ping statistics for 40.0.0.1

Packets: Sent=4, Received=4, Lost=0 (0% Loss),

Approximate round trip times in milli-seconds:

Minimum=2ms, Maximum=8ms, Average=4ms

N  
1/12/22