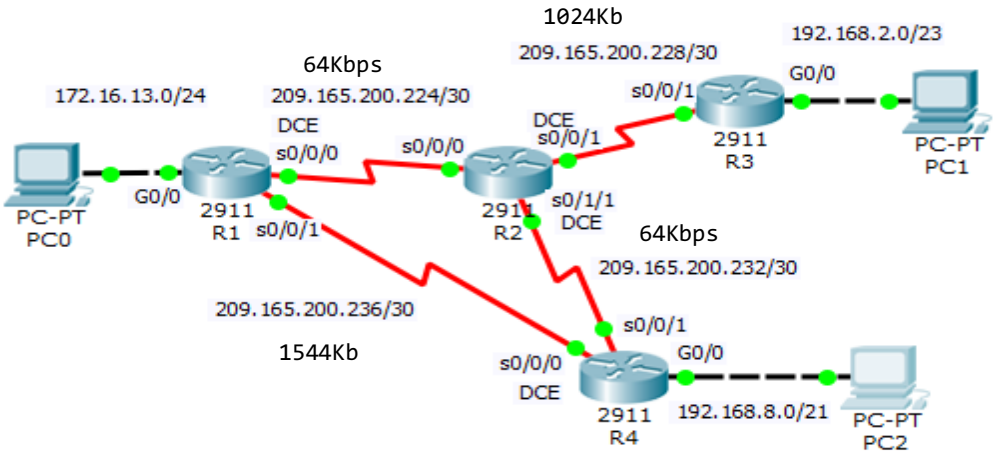
For the following network




Addresses Table

| Device | Interface | IP address | Subnet mask | Default Gateway |
|---|---|---|---|---|
| R1 | G0/0 | 172.16.13.1 | 255.255.255.0 | N/A |
| | S0/0/0 | 209.165.200.225 | 255.255.255.252 | N/A |
| | S0/0/1 | 209.165.200.238 | 255.255.255.252 | N/A |
| R2 | S0/0/0 | 209.165.200.226 | 255.255.255.252 | N/A |
| | S0/0/1 | 209.165.200.229 | 255.255.255.252 | N/A |
| | S0/1/1 | 209.165.200.233 | 255.255.255.252 | N/A |
| R3 | G0/0 | 192.168.2.1 | 255.255.254.0 | N/A |
| | S0/0/1 | 209.165.200.230 | 255.255.255.252 | N/A |
| | Lo0 | 3.3.3.3 | 255.255.255.255 | N/A |
| R4 | G0/0 | 192.168.8.1 | 255.255.248.0 | N/A |
| | S0/0/0 | 209.165.200.237 | 255.255.255.252 | N/A |
| | S0/0/1 | 209.165.200.234 | 255.255.255.252 | N/A |
| PC0 | | 172.16.13.10 | 255.255.255.0 | 172.16.13.1 |
| PC1 | | 192.168.2.10 | 255.255.254.0 | 192.168.2.1 |
| PC2 | | 192.168.8.10 | 255.255.248.0 | 192.168.8.1 |

1. **Set up the topology, configure basic device settings and verify LAN connectivity.**
2. **Configure ospf routing algorithm**
   a. ospf process id
      R1: 10 R2: 20 R3:30 R4: 40
   b. router id:
      R1: 1.1.1.1 R2: 2.2.2.2 R3:Loopback interface R4: Interface IP address
   c. On R1, and R2 enable the ospf by using the network addresses
   d. On R3, and R4 enable the ospf by using the interface ip addresses
   e. Configure all the LAN interfaces in all routers as a passive interface
   f. Adjusting the Reference Bandwidth to 10000
   g. Adjusting the interface Bandwidth as shown in the figure