BGP Configuration
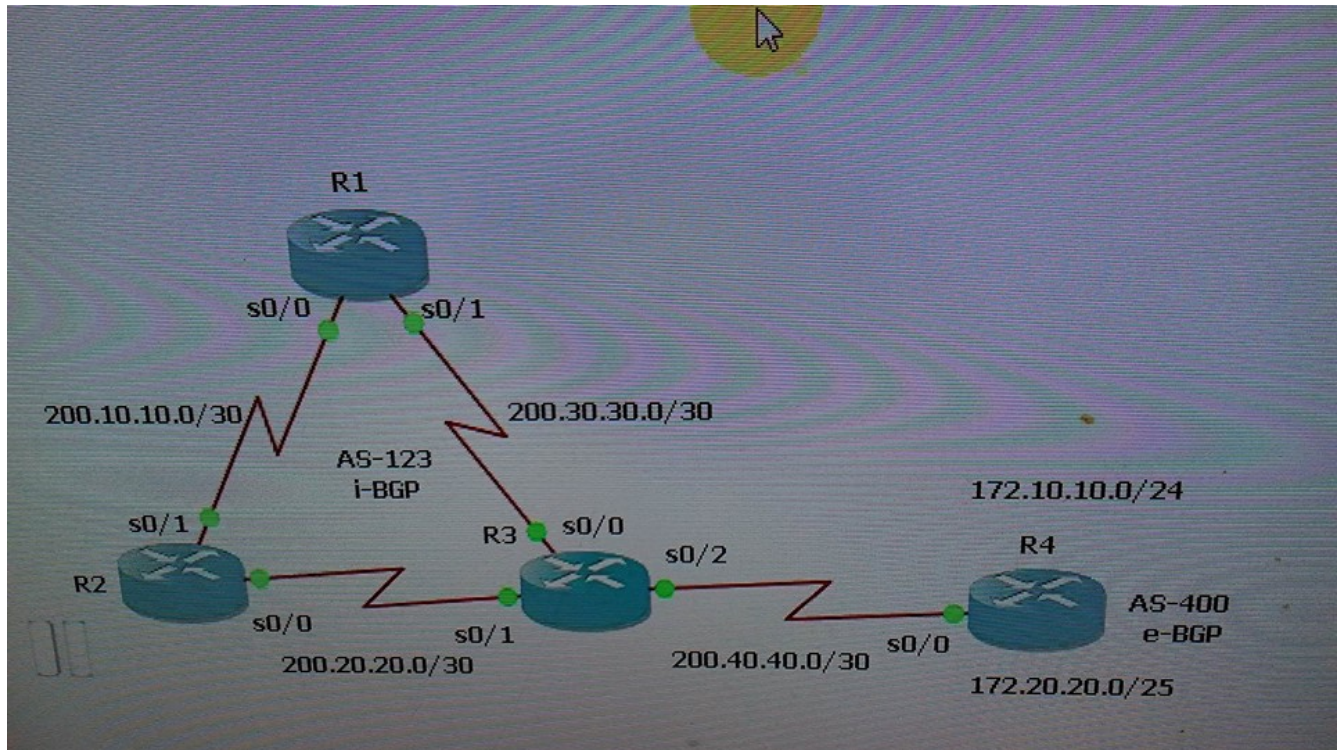(Border Gateway Protocol)

First of all configure interfaces for all routers and RIP for R1, R2 & R3

R1 (config) # router rip
R1 (config-router) # version 2
R1 (config-router) # no auto-summary
R1 (config-router) # network 0.0.0.0

R2 (config) # router rip
R2 (config-router) # version 2
R2 (config-router) # no auto-summary
R2 (config-router) # network 0.0.0.0

R3 (config) # router rip
R3 (config-router) # version 2
R3 (config-router) # no auto-summary
R3 (config-router) # network 0.0.0.0

R1 (config) # router bgp 123
R1 (config-router) # neighbor 200.10.10.2 remote-as 123
R1 (config-router) # neighbor 200.30.30.2 remote-as 123

R1 (config-router) # bgp router-id 1.1.1.1

R2 (config) # router bgp 123
R2 (config-router) # neighbor 200.10.10.1 remote-as 123
R2 (config-router) # neighbor 200.20.20.2 remote-as 123
R2 (config-router) # bgp router-id 2.2.2.2

R3 (config) # router bgp 123
R3 (config-router) # neighbor 200.20.20.1 remote-as 123
R3 (config-router) # neighbor 200.30.30.1 remote-as 123
R3 (config-router) # bgp router-id 3.3.3.3
R3 (config-router) # neighbor 200.40.40.2 remote-as 400

R4 (config) # router bgp 400
R4 (config-router) # bgp router-id 4.4.4.4
R4 (config-router) # network 172.20.20.0 mask 255.255.255.0
R4 (config-router) # network 172.10.10.0 mask 255.255.255.0
R4 (config-router) # neighbor 200.30.30.1 remote-as 123

R4 # show ip route
R4 # show ip bgp summary