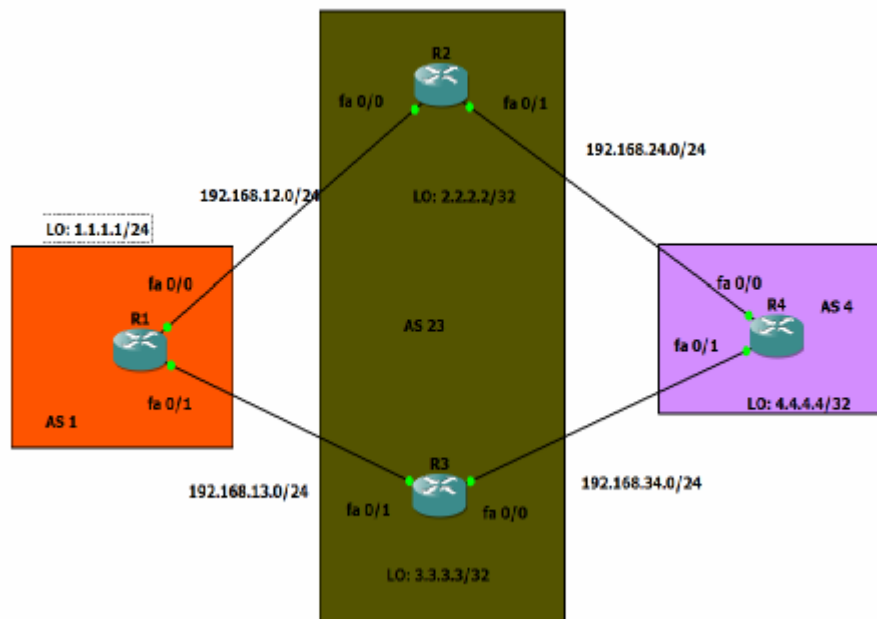Prac 6 Implement the Concept of BGP Path Attribute- MED.

R1# conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)# int fa 0/0
R1(config-if)# ip add 192.168.12.1 255.255.255.0
R1(config-if)# no shut
R1(config-if)# exit
R1(config)# int fa 0/1
R1(config-if)# ip add 192.168.13.1 255.255.255.0
R1(config-if)# no shut
R1(config-if)# exit
R1(config)# int lo0
R1(config-if)# ip add 1.1.1.1 255.255.255.255
R1(config-if)# exit
R1(config)# router bgp 1
R1(config-router)# neighbor 192.168.12.2 remote-as 23
R1(config-router)# neighbor 192.168.13.3 remote-as 23
R1(config-router)# redistribute connected
R1(config-router)# end
R2# conf t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)# int fa 0/0
R2(config-if)# ip add 192.168.12.2 255.255.255.0
R2(config-if)# no shut
R2(config-if)# exit
R2(config)# int fa 0/1
R2(config-if)# ip add 192.168.24.2 255.255.255.0
R2(config-if)# no shut
R2(config-if)# exit
R2(config)# int lo0
R2(config-if)# ip add 2.2.2.2 255.255.255.255
R2(config-if)# no shut

```
R2(config-if)# exit
R2(config)# router bgp 23
R2(config-router)# neighbor 192.168.12.1 remote-as 1
R2(config-router)# neighbor 192.168.24.4 remote-as 4
R2(config-router)# redistribute connected
R2(config-router)# end
R3# conf t
Enter configuration commands, one per line. End with CNTL/Z.
R3(config)# int fa 0/1
R3(config-if)# ip add 192.168.13.3 255.255.255.0
R3(config-if)# no shut
R3(config-if)# exit
R3(config)# int fa 0/0
R3(config-if)# ip add 192.168.34.3 255.255.255.0
R3(config-if)# no shut
R3(config-if)# exit
R3(config)# int lo0
R3(config-if)# ip add 3.3.3.3 255.255.255.255
R3(config-if)# no shut
R3(config-if)# exit
R3(config)# router bgp 23
R3(config-router)# neighbor 192.168.13.1 remote-as 1
R3(config-router)# neighbor 192.168.34.4 remote-as 4
R3(config-router)# redistribute connected
R3(config-router)# end

R3# show route map
route-map map not found
R3# show route-map
route-map MED-TEST, permit, sequence 1
Match clauses:
ip address (access-lists): 1
Set clauses:
metric 500
Policy routing matches: 0 packets, 0 bytes
route-map MED-TEST, permit, sequence 10
Match clauses:
ip address (access-lists): 1
Set clauses:
metric 500
Policy routing matches: 0 packets, 0 bytes
route-map MED-TEST, permit, sequence 20
Match clauses:
Policy routing matches: 0 packets, 0 bytes
Set clause:
R3# conf t
Enter configuration commands, one per line. End with CNTL/Z.
R3(config)# access-list 1 permit host 4.4.4.4
R3(config)#end
R3# show access-lists
```

Standard IP access list 1
10 permit 4.4.4.4 (1 match)
R3(config)# router bgp 23
R3(config-router)# neighbor 192.168.13.1 route-map MED-TEST out
R3(config-router)#end
R4#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R4(config)# int fa 0/0
R4(config-if)# ip add 192.168.24.4 255.255.255.0
R4(config-if)# no shut
R4(config-if)# exit
R4(config)# int fa 0/1
R4(config-if)# ip add 192.168.34.4 255.255.255.0
R4(config-if)#no shut
R4(config-if)#exit
R4(config)# int lo0
R4(config-if)# ip add 4.4.4.4 255.255.255.255
R4(config-if)# no shut
R4(config-if)# exit
R4(config)#router bgp 4
R4(config-router)# neighbor 192.168.24.2 remote-as 23
R4(config-router)# neighbor 192.168.34.3 remote-as 23
R4(config-router)# redistribute connected
R4(config-router)# end

Output:
R1# show ip bgp
BGP table version is 14, local router ID is 1.1.1.1
Status codes: s suppressed, d damped, h history, * valid, > best, i - internal
          RIB-failure, S Stale
Origin codes: i - IGP, e - EGP, ? - incomplete

```
Network         Next Hop        Metric LocPrf Weight Path
*> 1.1.1.1/32    0.0.0.0           0       32768 ?
*> 2.2.2.2/32    192.168.12.2      0       0    23 ?
*> 3.3.3.3/32    192.168.13.3      0       0    23 ?
*> 4.4.4.4/32    192.168.12.2      0       0    23 4 ?
               192.168.13.3     500      0    23 4 ?
*> 192.168.12.0  192.168.12.2      0       0    23 ?
*> 192.168.13.0  192.168.13.3      0       32768 ?
          0.0.0.0          0       0    23 ?
*> 192.168.24.0  192.168.13.3      0       0    23 4 ?
               192.168.12.2      0       0    23 ?
*> 192.168.34.0  192.168.12.2      0       0    23 4 ?
               192.168.13.3      0       0    23 ?
```