- ➢ R1 de Loopback 11 interface`ine 11.11.11.11/32 IP adresi verilecek.
- ➢ R1 de OSPF #1'in Router-ID'si Loopcak 11 adresi olacak.
- ➢ R1 de OSPF #2'nin Router-ID'si Loopcak 0 adresi olacak.
- ➢ R1 OSPF #1'i OSPF #2'ye redistribute edecek.
- ➢ R1 OSPF #2'yi OSPF #1'e redistribute edecek.
- ➢ R1 OSPF #1'i RIPv2'ye redistribute edecek.
- ➢ R1 RIPv2'yi OSPF #1'e redistribute edecek.
- ➢ R1 RIPv2'yi OSPF #2'ye redistribute edecek.
- ➢ R3 Loopback 0 interface`ini sadece RIPv2'ye dahil edecek.
- ➢ R3 RIPv2'yi EIGRP AS-200'e redistribute edecek.
- ➢ R4 EIGRP AS-200'ü OSPF #1'e redistribute edecek.
- ➢ R4 OSPF #1'i EIGRP AS-200'e redistribute edecek.
- ➢ R5 EIGRP #CISCO'yu OSPF #2'ye redistribute edecek.
- ➢ R5 OSPF #2'yi EIGRP #CISCO'ya redistribute edecek.
- ➢ R8 Sadece Loopback interface`lerini EIGRP #CISCO'ya redistribute edecek.

- ✓ R4 ve R8 birbirlerine loopback IP leri üzerinden erişebilecek:

```
R04#ping 172.16.85.85 source Loopback 45
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.16.85.85, timeout is 2 seconds:
Packet sent with a source address of 172.16.45.45
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 8/8/9 ms
R04#
```

- ✓ R8, R3`e erişecek:

```
R08#ping 3.3.3.3 source Loopback 0
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 3.3.3.3, timeout is 2 seconds:
Packet sent with a source address of 8.8.8.8
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/4/5 ms
R08#
```

- ✓ R1, R3`e aşağıdaki gibi erişecek:

```
R01#traceroute 3.3.3.3 source Loopback 0
Type escape sequence to abort.
Tracing the route to 3.3.3.3
VRF info: (vrf in name/id, vrf out name/id)
  1 192.168.13.3 0 msec *  0 msec
R01#
```

✓ R1, R2, R5 ve R8 in routing tabloları:

```
R01#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
       a - application route
       + - replicated route, % - next hop override


Gateway of last resort is not set

      1.0.0.0/32 is subnetted, 1 subnets
C        1.1.1.1 is directly connected, Loopback0
      2.0.0.0/32 is subnetted, 1 subnets
O        2.2.2.2 [110/11] via 192.168.12.2, 00:06:29, Ethernet0/2
      3.0.0.0/32 is subnetted, 1 subnets
R        3.3.3.3 [120/1] via 192.168.13.3, 00:00:09, Ethernet0/3
      4.0.0.0/32 is subnetted, 1 subnets
O        4.4.4.4 [110/75] via 192.168.12.2, 00:06:29, Ethernet0/2
      5.0.0.0/32 is subnetted, 1 subnets
O        5.5.5.5 [110/11] via 192.168.51.5, 00:06:41, Ethernet0/1
                 [110/11] via 192.168.15.5, 00:06:41, Ethernet0/0
      6.0.0.0/32 is subnetted, 1 subnets
O E2     6.6.6.6 [110/20] via 192.168.51.5, 00:06:41, Ethernet0/1
                 [110/20] via 192.168.15.5, 00:06:41, Ethernet0/0
      7.0.0.0/32 is subnetted, 1 subnets
O E2     7.7.7.7 [110/20] via 192.168.51.5, 00:06:41, Ethernet0/1
                 [110/20] via 192.168.15.5, 00:06:41, Ethernet0/0
      8.0.0.0/32 is subnetted, 1 subnets
O E2     8.8.8.8 [110/20] via 192.168.51.5, 00:06:36, Ethernet0/1
                 [110/20] via 192.168.15.5, 00:06:36, Ethernet0/0
      11.0.0.0/32 is subnetted, 1 subnets
C        11.11.11.11 is directly connected, Loopback1
      172.16.0.0/32 is subnetted, 12 subnets
O        172.16.40.40 [110/75] via 192.168.12.2, 00:06:29, Ethernet0/2
O        172.16.41.41 [110/75] via 192.168.12.2, 00:06:29, Ethernet0/2
O        172.16.42.42 [110/75] via 192.168.12.2, 00:06:29, Ethernet0/2
O E2     172.16.43.43 [110/20] via 192.168.12.2, 00:06:29, Ethernet0/2
O E2     172.16.44.44 [110/20] via 192.168.12.2, 00:06:29, Ethernet0/2
O E2     172.16.45.45 [110/20] via 192.168.12.2, 00:06:29, Ethernet0/2
O E2     172.16.80.80 [110/20] via 192.168.51.5, 00:06:36, Ethernet0/1
                      [110/20] via 192.168.15.5, 00:06:36, Ethernet0/0
O E2     172.16.81.81 [110/20] via 192.168.51.5, 00:06:36, Ethernet0/1
                      [110/20] via 192.168.15.5, 00:06:36, Ethernet0/0
O E2     172.16.82.82 [110/20] via 192.168.51.5, 00:06:36, Ethernet0/1
                      [110/20] via 192.168.15.5, 00:06:36, Ethernet0/0
O E2     172.16.83.83 [110/20] via 192.168.51.5, 00:06:36, Ethernet0/1
                      [110/20] via 192.168.15.5, 00:06:36, Ethernet0/0
O E2     172.16.84.84 [110/20] via 192.168.51.5, 00:06:36, Ethernet0/1
```

```
                          [110/20] via 192.168.15.5, 00:06:36, Ethernet0/0
O E2      172.16.85.85 [110/20] via 192.168.51.5, 00:06:36, Ethernet0/1
                          [110/20] via 192.168.15.5, 00:06:36, Ethernet0/0
       192.168.12.0/24 is variably subnetted, 2 subnets, 2 masks
C         192.168.12.0/24 is directly connected, Ethernet0/2
L         192.168.12.1/32 is directly connected, Ethernet0/2
       192.168.13.0/24 is variably subnetted, 2 subnets, 2 masks
C         192.168.13.0/24 is directly connected, Ethernet0/3
L         192.168.13.1/32 is directly connected, Ethernet0/3
       192.168.15.0/24 is variably subnetted, 2 subnets, 2 masks
C         192.168.15.0/24 is directly connected, Ethernet0/0
L         192.168.15.1/32 is directly connected, Ethernet0/0
O      192.168.24.0/24 [110/74] via 192.168.12.2, 00:06:29, Ethernet0/2
O E2   192.168.34.0/24 [110/20] via 192.168.12.2, 00:06:29, Ethernet0/2
       192.168.51.0/24 is variably subnetted, 2 subnets, 2 masks
C         192.168.51.0/24 is directly connected, Ethernet0/1
L         192.168.51.1/32 is directly connected, Ethernet0/1
O E2   192.168.56.0/24 [110/20] via 192.168.51.5, 00:06:41, Ethernet0/1
                          [110/20] via 192.168.15.5, 00:06:41, Ethernet0/0
O E2   192.168.57.0/24 [110/20] via 192.168.51.5, 00:06:41, Ethernet0/1
                          [110/20] via 192.168.15.5, 00:06:41, Ethernet0/0
O E2   192.168.68.0/24 [110/20] via 192.168.51.5, 00:06:41, Ethernet0/1
                          [110/20] via 192.168.15.5, 00:06:41, Ethernet0/0
O E2   192.168.78.0/24 [110/20] via 192.168.51.5, 00:06:41, Ethernet0/1
                          [110/20] via 192.168.15.5, 00:06:41, Ethernet0/0
R01#
```

```
R02#show ip route ospf
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
       a - application route
       + - replicated route, % - next hop override


Gateway of last resort is not set


      1.0.0.0/32 is subnetted, 1 subnets
O E2     1.1.1.1 [110/1] via 192.168.12.1, 00:05:22, Ethernet0/0
      3.0.0.0/32 is subnetted, 1 subnets
O E1     3.3.3.3 [110/30] via 192.168.12.1, 00:05:22, Ethernet0/0
      4.0.0.0/32 is subnetted, 1 subnets
O        4.4.4.4 [110/65] via 192.168.24.4, 00:05:45, Serial1/0
      5.0.0.0/32 is subnetted, 1 subnets
O E2     5.5.5.5 [110/11] via 192.168.12.1, 00:05:22, Ethernet0/0
      6.0.0.0/32 is subnetted, 1 subnets
O E2     6.6.6.6 [110/20] via 192.168.12.1, 00:05:22, Ethernet0/0
      7.0.0.0/32 is subnetted, 1 subnets
O E2     7.7.7.7 [110/20] via 192.168.12.1, 00:05:22, Ethernet0/0
      8.0.0.0/32 is subnetted, 1 subnets
O E2     8.8.8.8 [110/20] via 192.168.12.1, 00:05:22, Ethernet0/0
      11.0.0.0/32 is subnetted, 1 subnets
O E2     11.11.11.11 [110/1] via 192.168.12.1, 00:05:22, Ethernet0/0
      172.16.0.0/32 is subnetted, 12 subnets
O        172.16.40.40 [110/65] via 192.168.24.4, 00:05:45, Serial1/0
O        172.16.41.41 [110/65] via 192.168.24.4, 00:05:45, Serial1/0
O        172.16.42.42 [110/65] via 192.168.24.4, 00:05:45, Serial1/0
O E2     172.16.43.43 [110/20] via 192.168.24.4, 00:05:45, Serial1/0
O E2     172.16.44.44 [110/20] via 192.168.24.4, 00:05:45, Serial1/0
O E2     172.16.45.45 [110/20] via 192.168.24.4, 00:05:45, Serial1/0
O E2     172.16.80.80 [110/20] via 192.168.12.1, 00:05:22, Ethernet0/0
O E2     172.16.81.81 [110/20] via 192.168.12.1, 00:05:22, Ethernet0/0
O E2     172.16.82.82 [110/20] via 192.168.12.1, 00:05:22, Ethernet0/0
O E2     172.16.83.83 [110/20] via 192.168.12.1, 00:05:22, Ethernet0/0
O E2     172.16.84.84 [110/20] via 192.168.12.1, 00:05:22, Ethernet0/0
O E2     172.16.85.85 [110/20] via 192.168.12.1, 00:05:22, Ethernet0/0
O E1  192.168.13.0/24 [110/30] via 192.168.12.1, 00:05:22, Ethernet0/0
O E2  192.168.15.0/24 [110/10] via 192.168.12.1, 00:05:22, Ethernet0/0
O E2  192.168.34.0/24 [110/20] via 192.168.24.4, 00:05:45, Serial1/0
O E2  192.168.51.0/24 [110/10] via 192.168.12.1, 00:05:22, Ethernet0/0
O E2  192.168.56.0/24 [110/20] via 192.168.12.1, 00:05:22, Ethernet0/0
O E2  192.168.57.0/24 [110/20] via 192.168.12.1, 00:05:22, Ethernet0/0
O E2  192.168.68.0/24 [110/20] via 192.168.12.1, 00:05:22, Ethernet0/0
O E2  192.168.78.0/24 [110/20] via 192.168.12.1, 00:05:22, Ethernet0/0
R02#
```

```
R05#show ip ro
R05#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
       a - application route
       + - replicated route, % - next hop override


Gateway of last resort is not set

      1.0.0.0/32 is subnetted, 1 subnets
O        1.1.1.1 [110/11] via 192.168.51.1, 00:08:33, Ethernet0/1
                    [110/11] via 192.168.15.1, 00:08:33, Ethernet0/0
      2.0.0.0/32 is subnetted, 1 subnets
O E2     2.2.2.2 [110/11] via 192.168.51.1, 00:08:25, Ethernet0/1
                    [110/11] via 192.168.15.1, 00:08:25, Ethernet0/0
      3.0.0.0/32 is subnetted, 1 subnets
O E1     3.3.3.3 [110/30] via 192.168.51.1, 00:08:33, Ethernet0/1
                    [110/30] via 192.168.15.1, 00:08:33, Ethernet0/0
      4.0.0.0/32 is subnetted, 1 subnets
O E2     4.4.4.4 [110/75] via 192.168.51.1, 00:08:25, Ethernet0/1
                    [110/75] via 192.168.15.1, 00:08:25, Ethernet0/0
      5.0.0.0/32 is subnetted, 1 subnets
C        5.5.5.5 is directly connected, Loopback0
      6.0.0.0/32 is subnetted, 1 subnets
D        6.6.6.6 [90/1024640] via 192.168.56.6, 00:08:42, Ethernet0/2
      7.0.0.0/32 is subnetted, 1 subnets
D        7.7.7.7 [90/1024640] via 192.168.57.7, 00:08:37, Ethernet0/3
      8.0.0.0/32 is subnetted, 1 subnets
D        8.8.8.8 [90/1536640] via 192.168.56.6, 00:08:32, Ethernet0/2
      11.0.0.0/32 is subnetted, 1 subnets
O        11.11.11.11 [110/11] via 192.168.51.1, 00:08:33, Ethernet0/1
                       [110/11] via 192.168.15.1, 00:08:33, Ethernet0/0
      172.16.0.0/32 is subnetted, 12 subnets
O E2     172.16.40.40 [110/75] via 192.168.51.1, 00:08:25, Ethernet0/1
                          [110/75] via 192.168.15.1, 00:08:25, Ethernet0/0
O E2     172.16.41.41 [110/75] via 192.168.51.1, 00:08:25, Ethernet0/1
                          [110/75] via 192.168.15.1, 00:08:25, Ethernet0/0
O E2     172.16.42.42 [110/75] via 192.168.51.1, 00:08:25, Ethernet0/1
                          [110/75] via 192.168.15.1, 00:08:25, Ethernet0/0
O E2     172.16.43.43 [110/20] via 192.168.51.1, 00:08:25, Ethernet0/1
                          [110/20] via 192.168.15.1, 00:08:25, Ethernet0/0
O E2     172.16.44.44 [110/20] via 192.168.51.1, 00:08:25, Ethernet0/1
                          [110/20] via 192.168.15.1, 00:08:25, Ethernet0/0
O E2     172.16.45.45 [110/20] via 192.168.51.1, 00:08:25, Ethernet0/1
                          [110/20] via 192.168.15.1, 00:08:25, Ethernet0/0
D EX     172.16.80.80 [170/1536640] via 192.168.56.6, 00:08:27, Ethernet0/2
D EX     172.16.81.81 [170/1536640] via 192.168.56.6, 00:08:27, Ethernet0/2
D EX     172.16.82.82 [170/1536640] via 192.168.56.6, 00:08:27, Ethernet0/2
```

```
D EX     172.16.83.83 [170/1536640] via 192.168.56.6, 00:08:27, Ethernet0/2
D EX     172.16.84.84 [170/1536640] via 192.168.56.6, 00:08:27, Ethernet0/2
D EX     172.16.85.85 [170/1536640] via 192.168.56.6, 00:08:27, Ethernet0/2
O E2  192.168.12.0/24 [110/10] via 192.168.51.1, 00:08:33, Ethernet0/1
                      [110/10] via 192.168.15.1, 00:08:33, Ethernet0/0
O E1  192.168.13.0/24 [110/30] via 192.168.51.1, 00:08:33, Ethernet0/1
                      [110/30] via 192.168.15.1, 00:08:33, Ethernet0/0
      192.168.15.0/24 is variably subnetted, 2 subnets, 2 masks
C        192.168.15.0/24 is directly connected, Ethernet0/0
L        192.168.15.5/32 is directly connected, Ethernet0/0
O E2  192.168.24.0/24 [110/74] via 192.168.51.1, 00:08:25, Ethernet0/1
                      [110/74] via 192.168.15.1, 00:08:25, Ethernet0/0
O E2  192.168.34.0/24 [110/20] via 192.168.51.1, 00:08:25, Ethernet0/1
                      [110/20] via 192.168.15.1, 00:08:25, Ethernet0/0
      192.168.51.0/24 is variably subnetted, 2 subnets, 2 masks
C        192.168.51.0/24 is directly connected, Ethernet0/1
L        192.168.51.5/32 is directly connected, Ethernet0/1
      192.168.56.0/24 is variably subnetted, 2 subnets, 2 masks
C        192.168.56.0/24 is directly connected, Ethernet0/2
L        192.168.56.5/32 is directly connected, Ethernet0/2
      192.168.57.0/24 is variably subnetted, 2 subnets, 2 masks
C        192.168.57.0/24 is directly connected, Ethernet0/3
L        192.168.57.5/32 is directly connected, Ethernet0/3
D     192.168.68.0/24 [90/1536000] via 192.168.56.6, 00:08:42, Ethernet0/2
D     192.168.78.0/24 [90/14068062] via 192.168.57.7, 00:08:32, Ethernet0/3
R05#
```

```
R08#show ip route eigrp
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2
       i - IS-IS, su - IS-IS summary, L1 - IS-IS level-1, L2 - IS-IS level-2
       ia - IS-IS inter area, * - candidate default, U - per-user static route
       o - ODR, P - periodic downloaded static route, H - NHRP, l - LISP
       a - application route
       + - replicated route, % - next hop override


Gateway of last resort is not set

      1.0.0.0/32 is subnetted, 1 subnets
D EX     1.1.1.1 [170/1587200] via 192.168.68.6, 00:09:05, Ethernet0/0
      2.0.0.0/32 is subnetted, 1 subnets
D EX     2.2.2.2 [170/1587200] via 192.168.68.6, 00:08:58, Ethernet0/0
      3.0.0.0/32 is subnetted, 1 subnets
D EX     3.3.3.3 [170/1587200] via 192.168.68.6, 00:09:05, Ethernet0/0
      4.0.0.0/32 is subnetted, 1 subnets
D EX     4.4.4.4 [170/1587200] via 192.168.68.6, 00:08:58, Ethernet0/0
      5.0.0.0/32 is subnetted, 1 subnets
D        5.5.5.5 [90/1536640] via 192.168.68.6, 00:09:06, Ethernet0/0
      6.0.0.0/32 is subnetted, 1 subnets
D        6.6.6.6 [90/1024640] via 192.168.68.6, 00:09:06, Ethernet0/0
      7.0.0.0/32 is subnetted, 1 subnets
D        7.7.7.7 [90/2048640] via 192.168.68.6, 00:09:06, Ethernet0/0
      11.0.0.0/32 is subnetted, 1 subnets
D EX     11.11.11.11 [170/1587200] via 192.168.68.6, 00:09:05, Ethernet0/0
      172.16.0.0/32 is subnetted, 12 subnets
D EX     172.16.40.40 [170/1587200] via 192.168.68.6, 00:08:58, Ethernet0/0
D EX     172.16.41.41 [170/1587200] via 192.168.68.6, 00:08:58, Ethernet0/0
D EX     172.16.42.42 [170/1587200] via 192.168.68.6, 00:08:58, Ethernet0/0
D EX     172.16.43.43 [170/1587200] via 192.168.68.6, 00:08:58, Ethernet0/0
D EX     172.16.44.44 [170/1587200] via 192.168.68.6, 00:08:58, Ethernet0/0
D EX     172.16.45.45 [170/1587200] via 192.168.68.6, 00:08:58, Ethernet0/0
D EX  192.168.12.0/24 [170/1587200] via 192.168.68.6, 00:09:05, Ethernet0/0
D EX  192.168.13.0/24 [170/1587200] via 192.168.68.6, 00:09:05, Ethernet0/0
D EX  192.168.15.0/24 [170/1587200] via 192.168.68.6, 00:09:06, Ethernet0/0
D EX  192.168.24.0/24 [170/1587200] via 192.168.68.6, 00:08:58, Ethernet0/0
D EX  192.168.34.0/24 [170/1587200] via 192.168.68.6, 00:08:58, Ethernet0/0
D EX  192.168.51.0/24 [170/1587200] via 192.168.68.6, 00:09:06, Ethernet0/0
D     192.168.56.0/24 [90/1536000] via 192.168.68.6, 00:09:06, Ethernet0/0
D     192.168.57.0/24 [90/2048000] via 192.168.68.6, 00:09:06, Ethernet0/0
R08#
```