Packet Trace -
IPv6-

		IPv6-	link-local
R1	G0/0	2001:db8:acad:00c8::1	fe80::1
	G0/1	2001:db8:acad:00c9::1	fe80::1
	S0/0/0	2001:db8:acad:00cc::1	fe80::1
R2	G0/0	2001:db8:acad:00ca::1	fe80::2
	G0/1	2001:db8:acad:00cb::1	fe80::2
	S0/0/0	2001:db8:acad:00cc::2	fe80::2
PC1	NIC	Auto Config	
PC2	NIC	Auto Config	
PC3	NIC	Auto Config	
PC4	NIC	Auto Config	

1.   **IPv6-**
2.   **IPv6**   **.**
3.   **IPv6**   **.**

,   IPv6   **.**

   .   IPv6
   .   , IPv6.
     IPv6   **.**

1.   **IPv6-**

IPv6 **2001:db8:acad:00c8::/64.**
.
,   **.**
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R1 G0/0/ LAN	2001:db8:acad:00c8::0/64
R1 G0/1 LAN	2001:db8:acad:00c9::0/64
R2 G0/0 LAN	2001:db8:acad:00ca::0/64
R2 G0/1 LAN	2001:db8:acad:00cb::0/64
R1 - R2	2001:db8:acad:00cc::0/64

2. **IPv6** **.**

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.

) IP- LAN .
) link-local , .
) R1.
) R2.
) IPv6- .

```
R1>enable
R1#config t
Enter configuration commands, one per line.  End with CNTL/Z.
R1(config)#interface G0/0
R1(config-if)#ipv6 address 2001:db8:acad:00c8::1/64
R1(config-if)#ipv6 address fe80::1 link-local
R1(config-if)#unicast ipv6-routing
                ^
% Invalid input detected at '^' marker.

R1(config-if)#ipv6 unicast-routing
R1(config)#interface G0/0
R1(config-if)#no shutdown

R1(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

R1(config-if)#interface G0/1
R1(config-if)#ipv6 address 2001:db8:acad:00c9::1/64
R1(config-if)#ipv6 address fe80::1 link-local
R1(config-if)#ipv6 unicast-routing
R1(config)#interface G0/1
R1(config-if)#no shutdown

R1(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

R1(config-if)#exit
R1(config)#interface S0/0/0
R1(config-if)#ipv6 address 2001:db8:acad:00cc::1/64
R1(config-if)#ipv6 address fe80::1 link-local
R1(config-if)#ipv6 unicast-routing
R1(config)#interface S0/0/0
R1(config-if)#no shutdown

%LINK-5-CHANGED: Interface Serial0/0/0, changed state to down
R1(config-if)#
R1(config-if)#
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up
```

```
R2>enable
R2#config t
Enter configuration commands, one per line.  End with CNTL/Z.
R2(config)#interface G0/0
R2(config-if)#ipv6 address 2001:db8:acad:00ca::1/64
R2(config-if)#ipv6 address fe80::2 link-local
R2(config-if)#ipv6 unicast-routing
R2(config)#interface G0/0
R2(config-if)#no shutdown

R2(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

R2(config-if)#interface G0/1
R2(config-if)#ipv6 address 2001:db8:acad:00cb::1/64
R2(config-if)#ipv6 address fe80::2 link-local
R2(config-if)#ipv6 unicast-routing
R2(config)#interface G0/1
R2(config-if)#no shutdown

R2(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

R2(config-if)#exit
R2(config)#interface S0/0/0
R2(config-if)#ipv6 address 2001:db8:acad:00cc::2/64
R2(config-if)#ipv6 address fe80::2 link-local
R2(config-if)#ipv6 unicast-routing
R2(config)#interface S0/0/0
R2(config-if)#no shutdown

R2(config-if)#
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up

R2(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up
```

IPv6 Configuration

○ Automatic ○ Static

| IPv6 Address | 2001:DB8:ACAD:C8:230:F2FF:FEBA:2C3A | / 64 |

| Link Local Address | FE80::230:F2FF:FEBA:2C3A |

| Default Gateway | FE80::1 |

3. IPv6 **.**

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