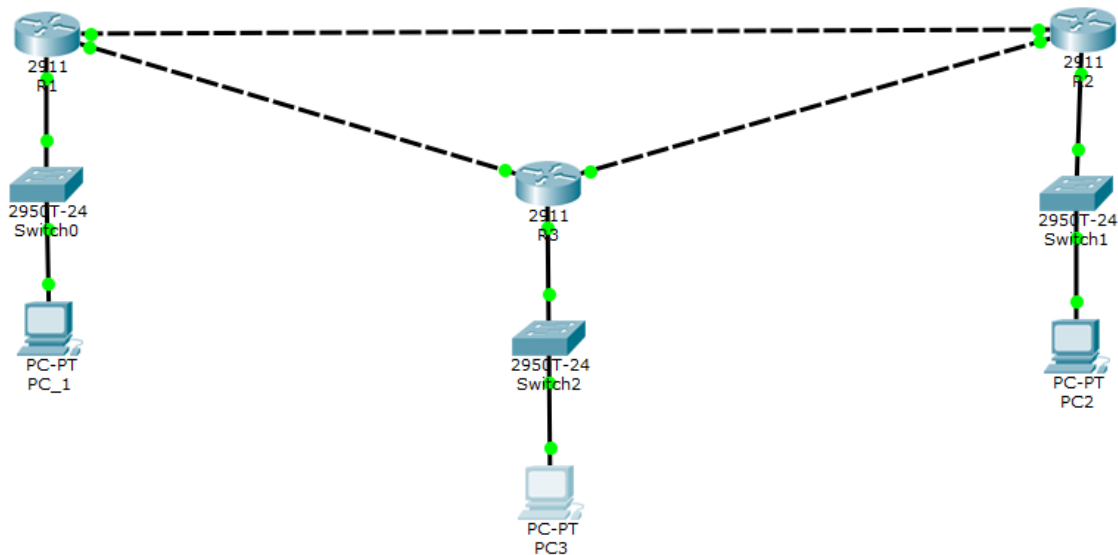


1. All links are active for given network:



1.1. 1 to 2 tracert

```
C:\>ping 192.168.30.100

Pinging 192.168.30.100 with 32 bytes of data:

Request timed out.
Reply from 192.168.30.100: bytes=32 time=1ms TTL=126
Reply from 192.168.30.100: bytes=32 time<1ms TTL=126
Reply from 192.168.30.100: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.30.100:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>tracert 192.168.30.100

Tracing route to 192.168.30.100 over a maximum of 30 hops:

  0  0 ms    0 ms    0 ms    192.168.10.1
  1  0 ms    0 ms    0 ms    192.168.20.2
  2  0 ms    0 ms    0 ms    192.168.30.100

Trace complete.
```

1.2. 1 to 3 tracert:

```
C:\>ping 192.168.60.100

Pinging 192.168.60.100 with 32 bytes of data:

Request timed out.
Reply from 192.168.60.100: bytes=32 time<1ms TTL=126
Reply from 192.168.60.100: bytes=32 time<1ms TTL=126
Reply from 192.168.60.100: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.60.100:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>tracert 192.168.60.100

Tracing route to 192.168.60.100 over a maximum of 30 hops:

  0  0 ms    0 ms    0 ms    192.168.10.1
  1  0 ms    0 ms    0 ms    192.168.40.2
  2  0 ms    0 ms    0 ms    192.168.60.100

Trace complete.
```

1.3. 2 to 1 tracert:

```
Packet Tracer PC Command Line 1.0
C:\>tracert 192.168.10.100

Tracing route to 192.168.10.100 over a maximum of 30 hops:

  0  0 ms    0 ms    0 ms    192.168.30.1
  1  0 ms    0 ms    0 ms    192.168.20.1
  2  0 ms    0 ms    0 ms    192.168.10.100

Trace complete.
```

1.4. 2 to 3 tracert:

```
C:\>tracert 192.168.60.100

Tracing route to 192.168.60.100 over a maximum of 30 hops:

  0  0 ms    0 ms    0 ms    192.168.30.1
  1  0 ms    0 ms    0 ms    192.168.50.2
  2  0 ms    0 ms    0 ms    192.168.60.100

Trace complete.
```

1.5. 3 to 1 tracert:

```
Packet Tracer PC Command Line 1.0
C:\>TRACERT 192.168.10.100

Tracing route to 192.168.10.100 over a maximum of 30 hops:

  1    2 ms    0 ms    0 ms    192.168.60.1
  2    0 ms    1 ms    1 ms    192.168.40.1
  3    0 ms    0 ms    0 ms    192.168.10.100

Trace complete.
```

1.6. 3 to 2 tracert:

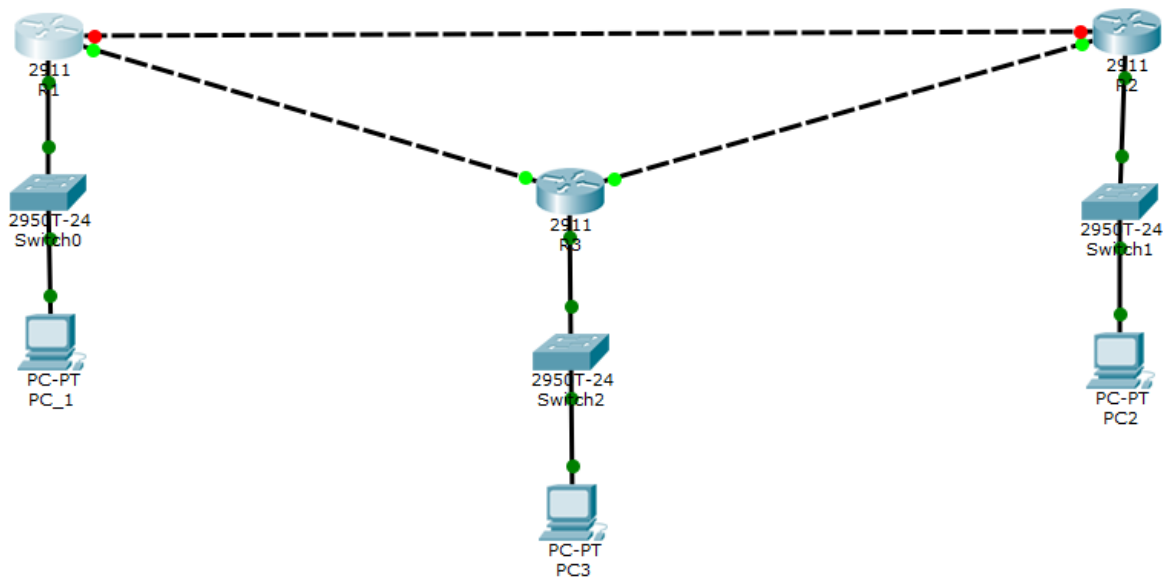
```
C:\>TRACERT 192.168.30.100

Tracing route to 192.168.30.100 over a maximum of 30 hops:

  1    0 ms    0 ms    0 ms    192.168.60.1
  2    0 ms    0 ms    0 ms    192.168.50.1
  3    0 ms    0 ms    0 ms    192.168.30.100

Trace complete.
```

2. Down the link between router R1 and R2:



2.1. 1 to 2 tracert

```
C:\>tracert 192.168.30.100

Tracing route to 192.168.30.100 over a maximum of 30 hops:

  1  0 ms    0 ms    0 ms    192.168.10.1
  2  0 ms    0 ms    0 ms    192.168.40.2
  3  0 ms    0 ms    0 ms    192.168.50.1
  4  0 ms    0 ms    0 ms    192.168.30.100

Trace complete.
```

2.2. 1 to 3 tracert:

```
C:\>tracert 192.168.60.100

Tracing route to 192.168.60.100 over a maximum of 30 hops:

  1  0 ms    0 ms    0 ms    192.168.10.1
  2  1 ms    0 ms    1 ms    192.168.40.2
  3  1 ms    0 ms    0 ms    192.168.60.100

Trace complete.
```

2.3. 2 to 1 tracert:

```
C:\>tracert 192.168.10.100

Tracing route to 192.168.10.100 over a maximum of 30 hops:

  1  0 ms    0 ms    0 ms    192.168.30.1
  2  0 ms    0 ms    0 ms    192.168.50.2
  3  0 ms    0 ms    0 ms    192.168.40.1
  4  0 ms    0 ms    0 ms    192.168.10.100

Trace complete.
```

2.4. 2 to 3 tracert:

```
C:\>tracert 192.168.60.100

Tracing route to 192.168.60.100 over a maximum of 30 hops:

  1  0 ms    0 ms    0 ms    192.168.30.1
  2  0 ms    0 ms    0 ms    192.168.50.2
  3  0 ms    0 ms    0 ms    192.168.60.100

Trace complete.
```

2.5. 3 to 1 tracert:

```
Packet Tracer PC Command Line 1.0
C:\>TRACERT 192.168.10.100

Tracing route to 192.168.10.100 over a maximum of 30 hops:

  1    2 ms    0 ms    0 ms    192.168.60.1
  2    0 ms    1 ms    1 ms    192.168.40.1
  3    0 ms    0 ms    0 ms    192.168.10.100

Trace complete.
```

2.6. 3 to 2 tracert:

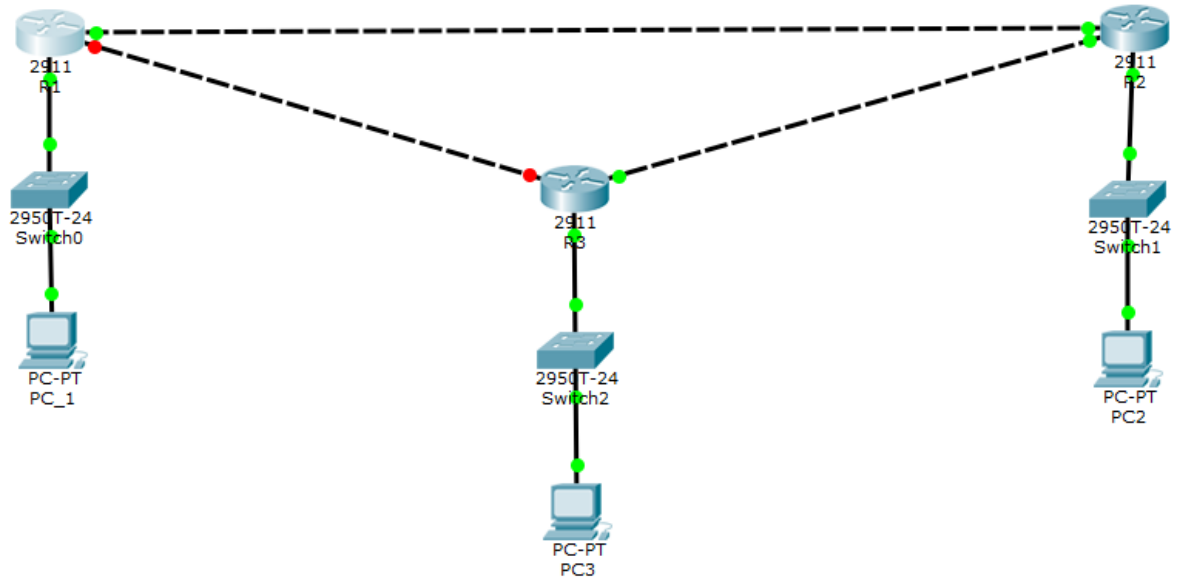
```
C:\>TRACERT 192.168.30.100

Tracing route to 192.168.30.100 over a maximum of 30 hops:

  1    0 ms    0 ms    0 ms    192.168.60.1
  2    0 ms    0 ms    0 ms    192.168.50.1
  3    0 ms    0 ms    0 ms    192.168.30.100

Trace complete.
```

3. Down the link between router R1 and R3:



3.1. 1 to 2 tracert

```
C:\>tracert 192.168.30.100

Tracing route to 192.168.30.100 over a maximum of 30 hops:

  1  0 ms    0 ms    0 ms    192.168.10.1
  2  1 ms    1 ms    0 ms    192.168.20.2
  3  0 ms    0 ms    0 ms    192.168.30.100

Trace complete.
```

3.2. 1 to 3 tracert:

```
C:\>tracert 192.168.60.100

Tracing route to 192.168.60.100 over a maximum of 30 hops:

  1  1 ms    0 ms    0 ms    192.168.10.1
  2  0 ms    0 ms    0 ms    192.168.20.2
  3  0 ms    0 ms    0 ms    192.168.50.2
  4  0 ms    0 ms    0 ms    192.168.60.100

Trace complete.
```

3.3. 2 to 1 tracert:

```
C:\>tracert 192.168.10.100

Tracing route to 192.168.10.100 over a maximum of 30 hops:

  1    1 ms      0 ms      0 ms      192.168.30.1
  2    0 ms      0 ms      1 ms      192.168.20.1
  3    0 ms      0 ms      0 ms      192.168.10.100

Trace complete.
```

3.4. 2 to 3 tracert:

```
C:\>tracert 192.168.60.100

Tracing route to 192.168.60.100 over a maximum of 30 hops:

  1    0 ms      0 ms      0 ms      192.168.30.1
  2    0 ms      0 ms      0 ms      192.168.50.2
  3    0 ms      0 ms      0 ms      192.168.60.100

Trace complete.
```

3.5. 3 to 1 tracert:

```
C:\>TRACERT 192.168.10.100

Tracing route to 192.168.10.100 over a maximum of 30 hops:

  1    0 ms      0 ms      2 ms      192.168.60.1
  2    0 ms      1 ms      0 ms      192.168.50.1
  3    0 ms      0 ms      0 ms      192.168.20.1
  4    0 ms      0 ms      0 ms      192.168.10.100

Trace complete.
```

3.6. 3 to 2 tracert:

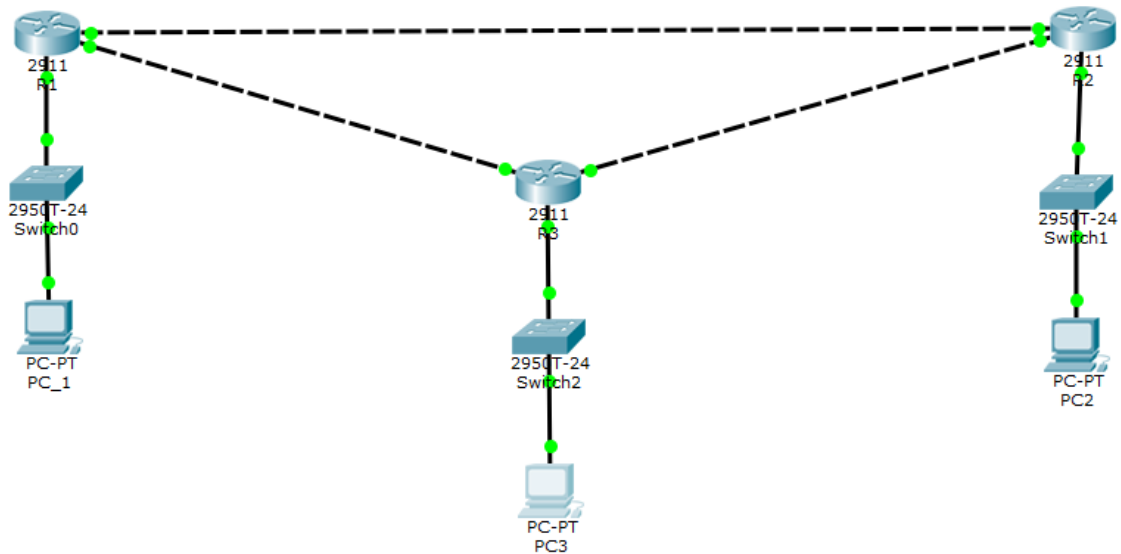
```
C:\>TRACERT 192.168.30.100

Tracing route to 192.168.30.100 over a maximum of 30 hops:

  1    0 ms      0 ms      0 ms      192.168.60.1
  2    0 ms      0 ms      0 ms      192.168.50.1
  3    0 ms      0 ms      0 ms      192.168.30.100

Trace complete.
```


4. Extract static routes from network and then disable RIP protocol delete network from RIP of each router and perform static routes and check following:



4.1. 1 to 2 tracert

```

C:\>tracert 192.168.60.100

Tracing route to 192.168.60.100 over a maximum of 30 hops:

  1  1 ms    0 ms    0 ms    192.168.10.1
  2  1 ms    0 ms    0 ms    192.168.40.2
  3  0 ms    0 ms    0 ms    192.168.60.100

Trace complete.
  
```

4.2. 1 to 3 tracert:

```

C:\>tracert 192.168.30.100

Tracing route to 192.168.30.100 over a maximum of 30 hops:

  1  0 ms    0 ms    0 ms    192.168.10.1
  2  0 ms    0 ms    1 ms    192.168.20.2
  3  0 ms    0 ms    1 ms    192.168.30.100

Trace complete.
  
```

4.3. 2 to 1 tracert:

```
Packet Tracer PC Command Line 1.0
C:\>tracert 192.168.10.100

Tracing route to 192.168.10.100 over a maximum of 30 hops:

  1    0 ms      0 ms      0 ms      192.168.30.1
  2    0 ms      0 ms      0 ms      192.168.20.1
  3    0 ms      0 ms      0 ms      192.168.10.100

Trace complete.
```

4.4. 2 to 3 tracert:

```
C:\>tracert 192.168.60.100

Tracing route to 192.168.60.100 over a maximum of 30 hops:

  1    0 ms      0 ms      0 ms      192.168.30.1
  2    0 ms      0 ms      0 ms      192.168.50.2
  3    0 ms      0 ms      0 ms      192.168.60.100

Trace complete.
```

4.5. 3 to 1 tracert:

```
Packet Tracer PC Command Line 1.0
C:\>TRACERT 192.168.10.100

Tracing route to 192.168.10.100 over a maximum of 30 hops:

  1    2 ms      0 ms      0 ms      192.168.60.1
  2    0 ms      1 ms      1 ms      192.168.40.1
  3    0 ms      0 ms      0 ms      192.168.10.100

Trace complete.
```

4.6. 3 to 2 tracert:

```
C:\>TRACERT 192.168.30.100

Tracing route to 192.168.30.100 over a maximum of 30 hops:

  1    0 ms      0 ms      0 ms      192.168.60.1
  2    0 ms      0 ms      0 ms      192.168.50.1
  3    0 ms      0 ms      0 ms      192.168.30.100

Trace complete.
```