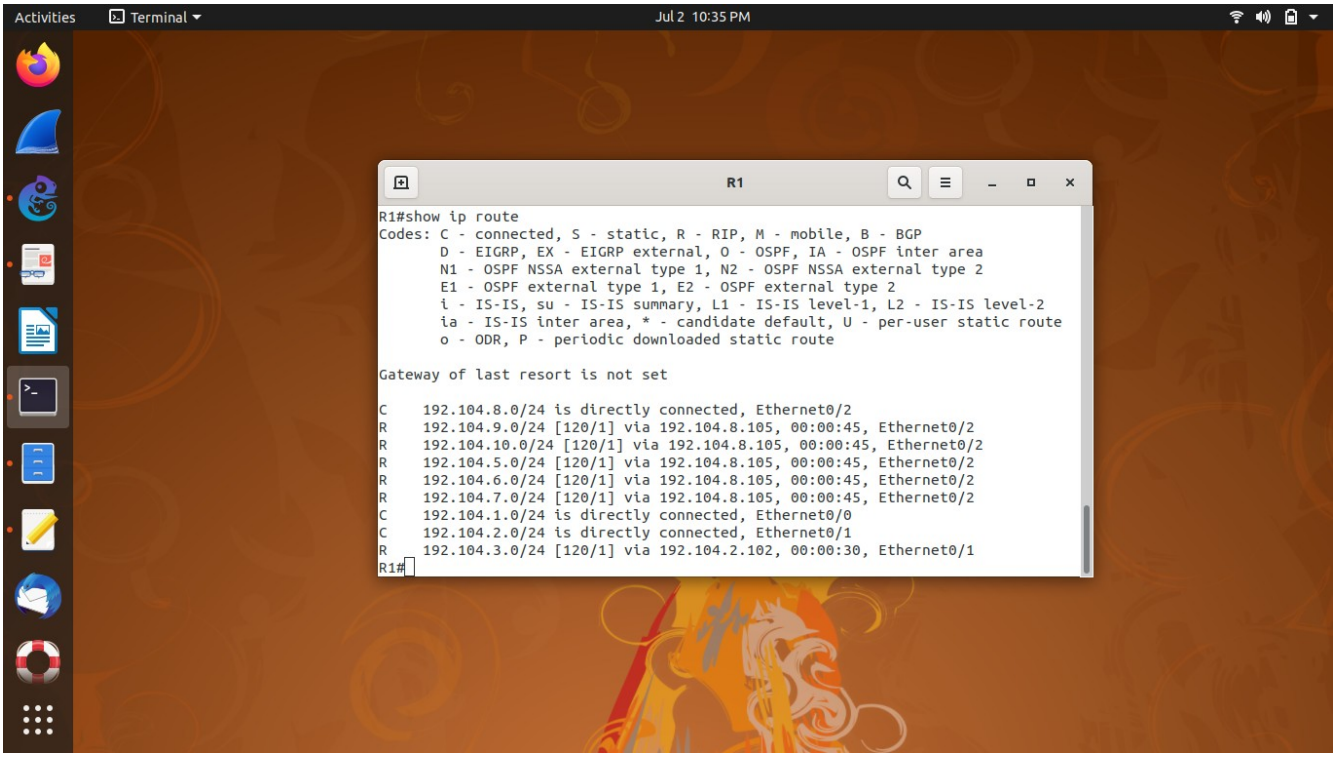
Show ip route :-

1) R1 :

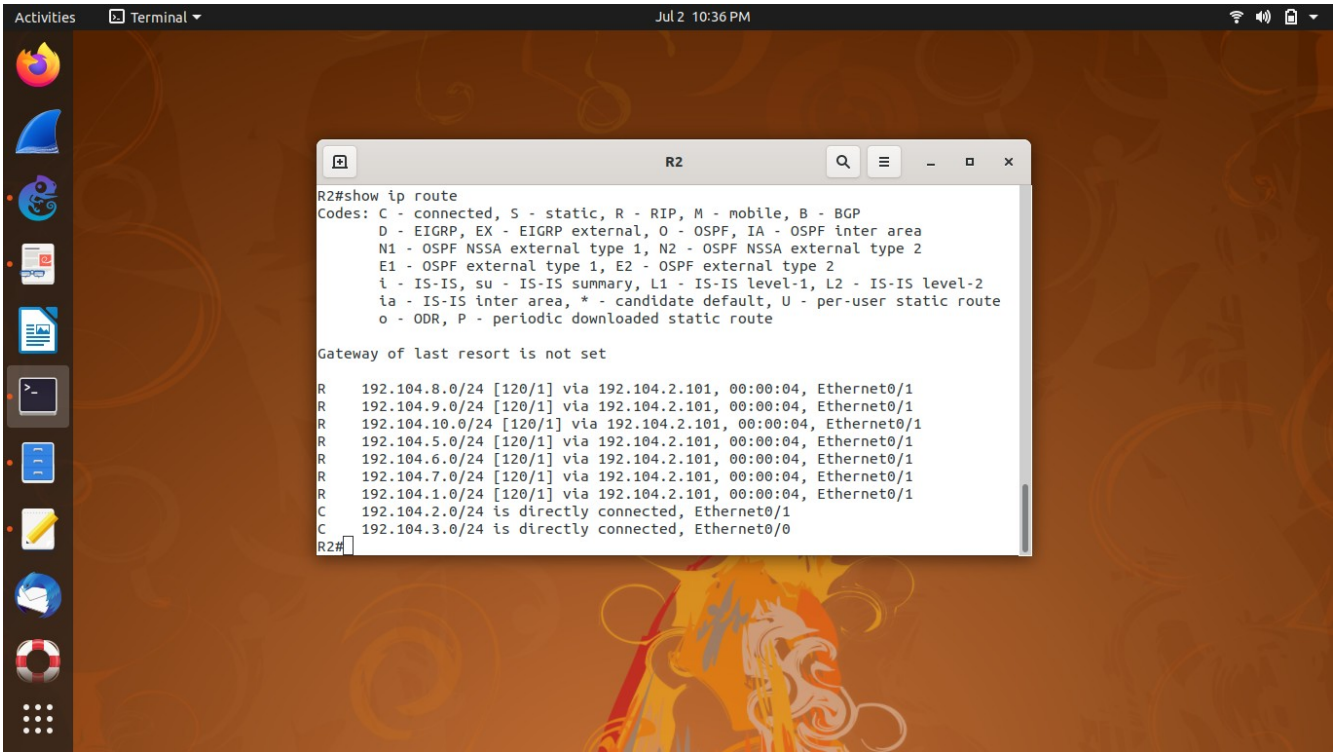


R1 is directly connected to PC1, R2, R5 via 192.104.1.101, 192.104.2.101 and 192.104.8.101 respectively.
I'll refer network 192.104.x.10y as network x.

Since the link of R2-R3 is shutdown, the only path to reach networks 5,6,7,9,10 is via 8, which passes through R5, and the only way to reach 3 is via 2, which passes through R2.

Thus, while earlier, R1 had 2 paths to every other network in the figure, but now, there is only 1 path to reach each network.

2) R2:

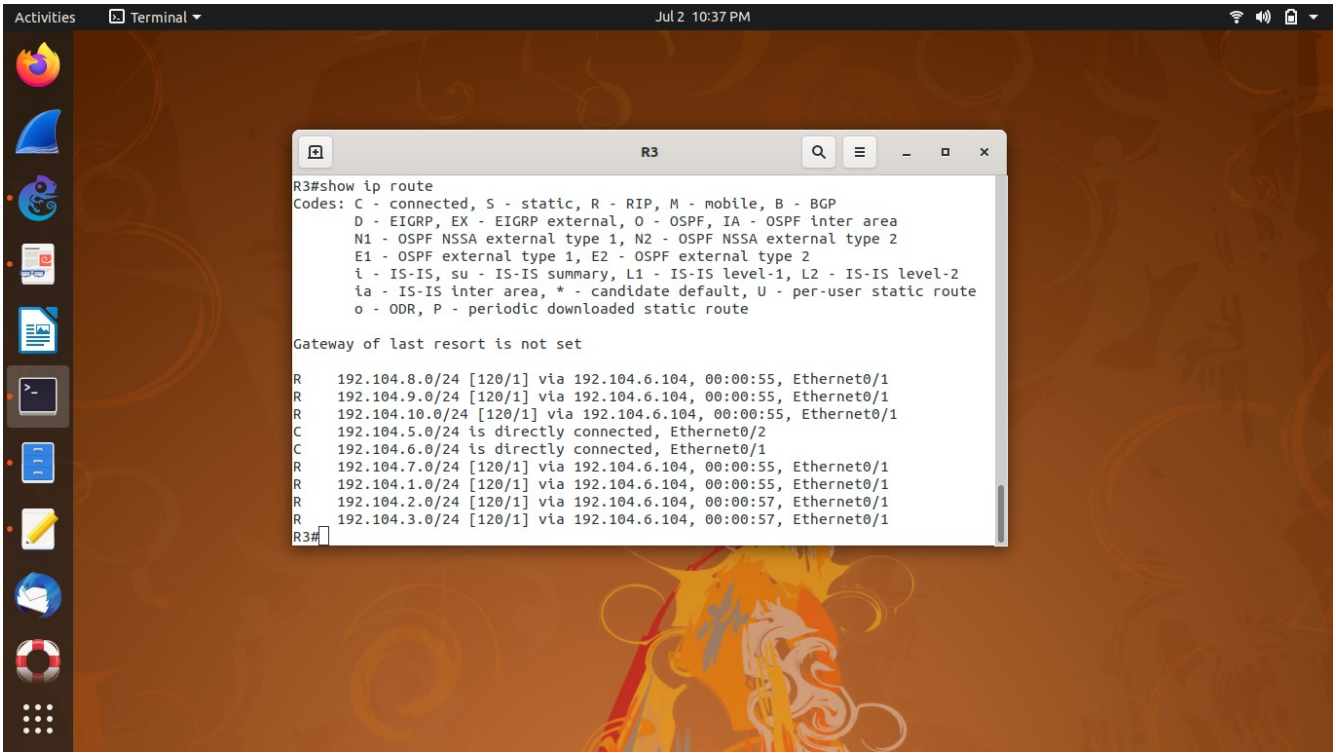


R2 is directly connected to PC2, R1 via 192.104.3.102, 192.104.2.102 respectively.
I'll refer network 192.104.x.10y as network x.

Since the link of R2-R3 is shutdown, the only path to reach networks 1,2,5,6,7,8,9,10 is via 2, which passes through R1.

Thus, while earlier, R2 could reach networks 5,6,7,9 via 4, now, it can reach all the other networks via only 1 path, passing through 2. This is because network 4 is shutdown.

3) R3:

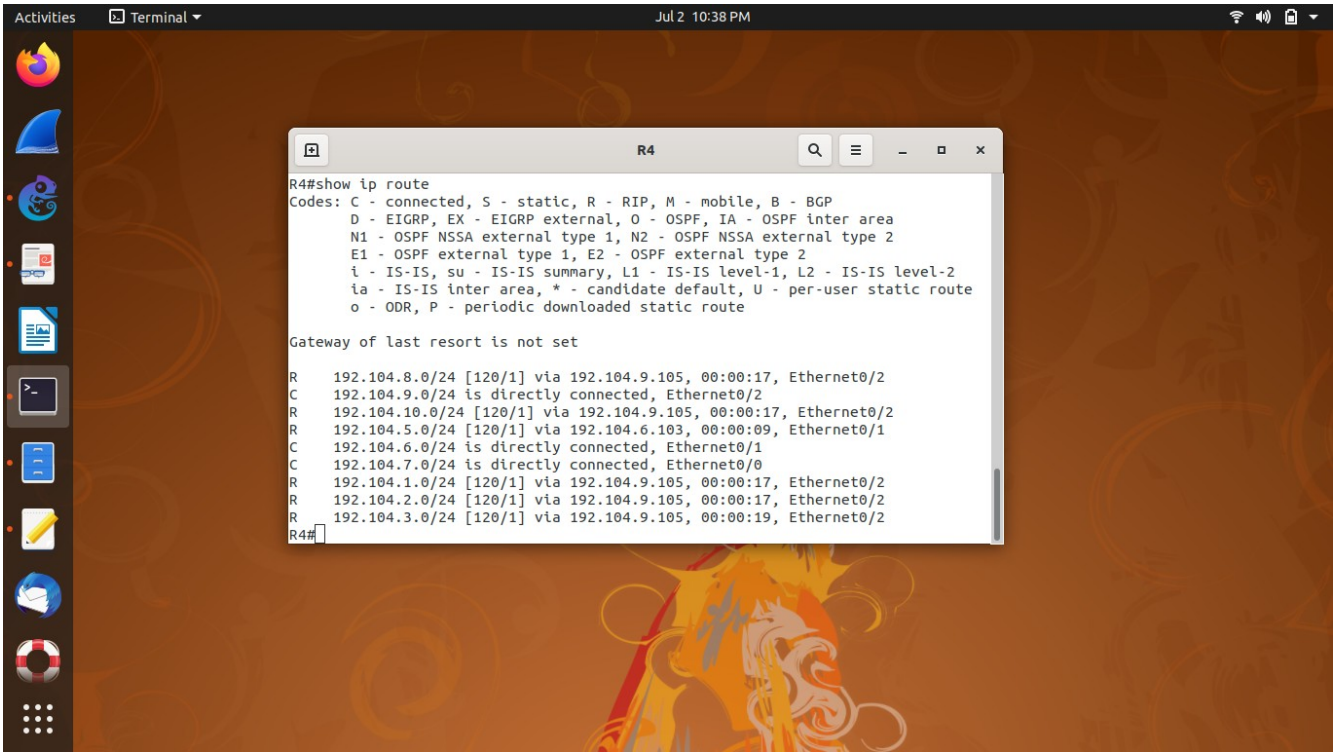


R3 is directly connected to PC3, R4 via 192.104.5.103, 192.104.6.103 respectively.
I'll refer network 192.104.x.10y as network x.

Since the link of R2-R3 is shutdown, the only path to reach networks 1,2,3,7,8,9,10 is via 6, which passes through R4.

Thus, while earlier, R3 could reach networks 1,2,3,8,10 via 4, now, it can reach all the other networks via only 1 path, passing through 6. This is because network 4 is shutdown. Thus, there is only 1 path to all networks, as loop has being removed.

4) R4:

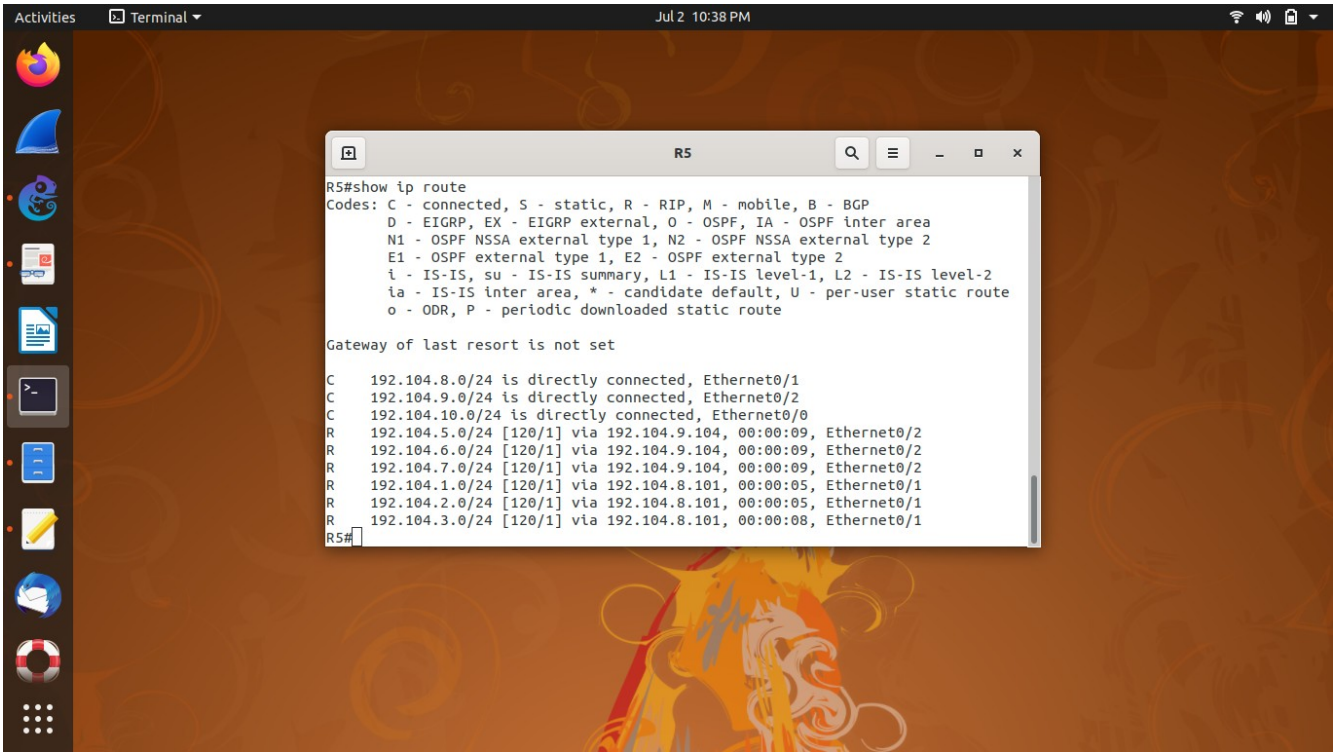


R4 is directly connected to PC4, R3, R5 via 192.104.7.104, 192.104.6.104 and 192.104.9.104 respectively.
I'll refer network 192.104.x.10y as network x.

Since the link of R2-R3 is shutdown, the only path to reach networks 1,2,3,8,10 is via 9, which passes through R5, and the only path to reach network 5 is via 6, which passes through R3.

Thus, while earlier, R4 could reach networks 1,2,3,8,4,5 via 6, now, the only network it connects to via 6, is network 5. Earlier, networks 8,10 were reached via 9, while now, the networks 1,2,3,8,10 can be reached via 9. This is because network 4 is shutdown. Thus, there is only 1 path to all networks, as loop has being removed.

5) R5:



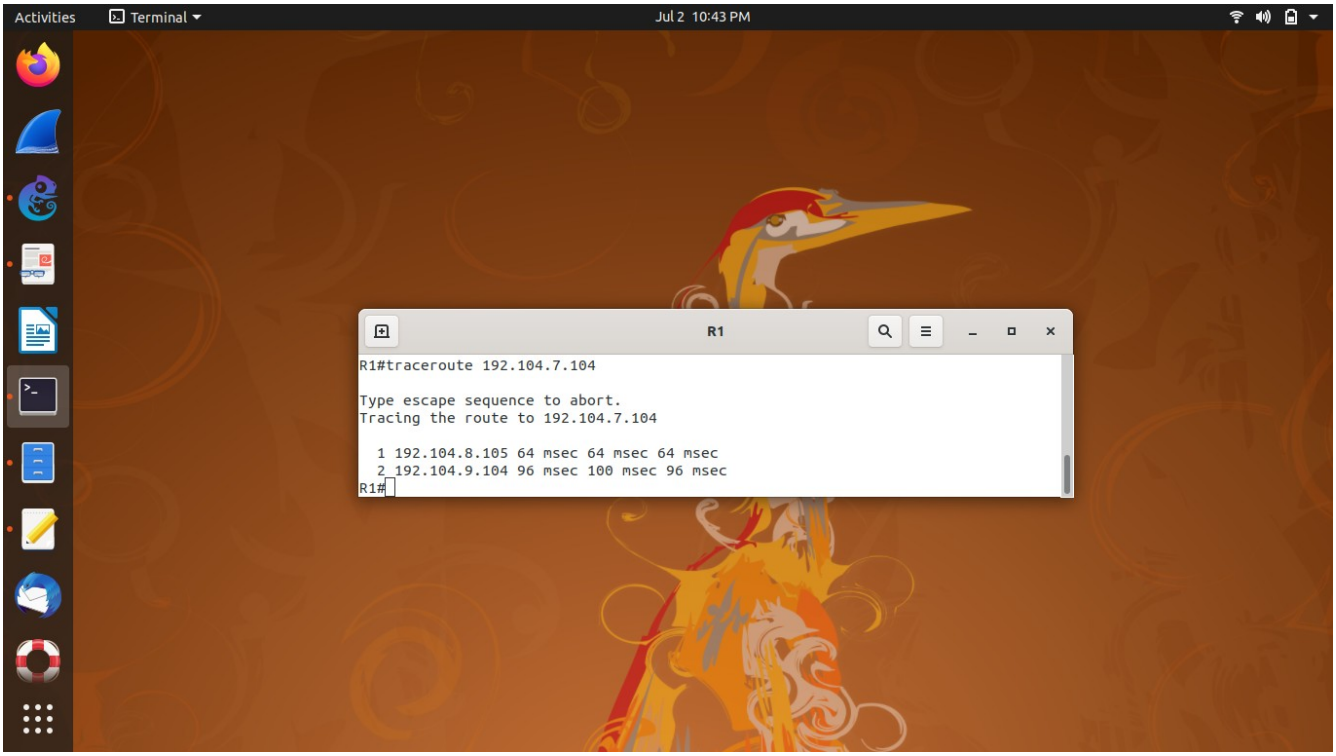
R5 is directly connected to PC5, R1, R4 via 192.104.10.105, 192.104.8.105 and 192.104.9.105 respectively.
I'll refer network 192.104.x.10y as network x.

Since the link of R2-R3 is shutdown, the only path to reach networks 5,6,7 is via 9, which passes through R4, and the only path to reach networks 1,2,3 is via 8, which passes through R1.

Thus, while earlier, R5 could reach networks 1,2,3,4,5,6,7 via 9, now, the only networks it connects to via 9 are networks 5,6,7. Earlier, networks 1,2 were reached via 8, while now, the networks 1,2,3 can be reached via 8. This is because network 4 is shutdown. Thus, there is only 1 path to all networks, as loop has being removed.

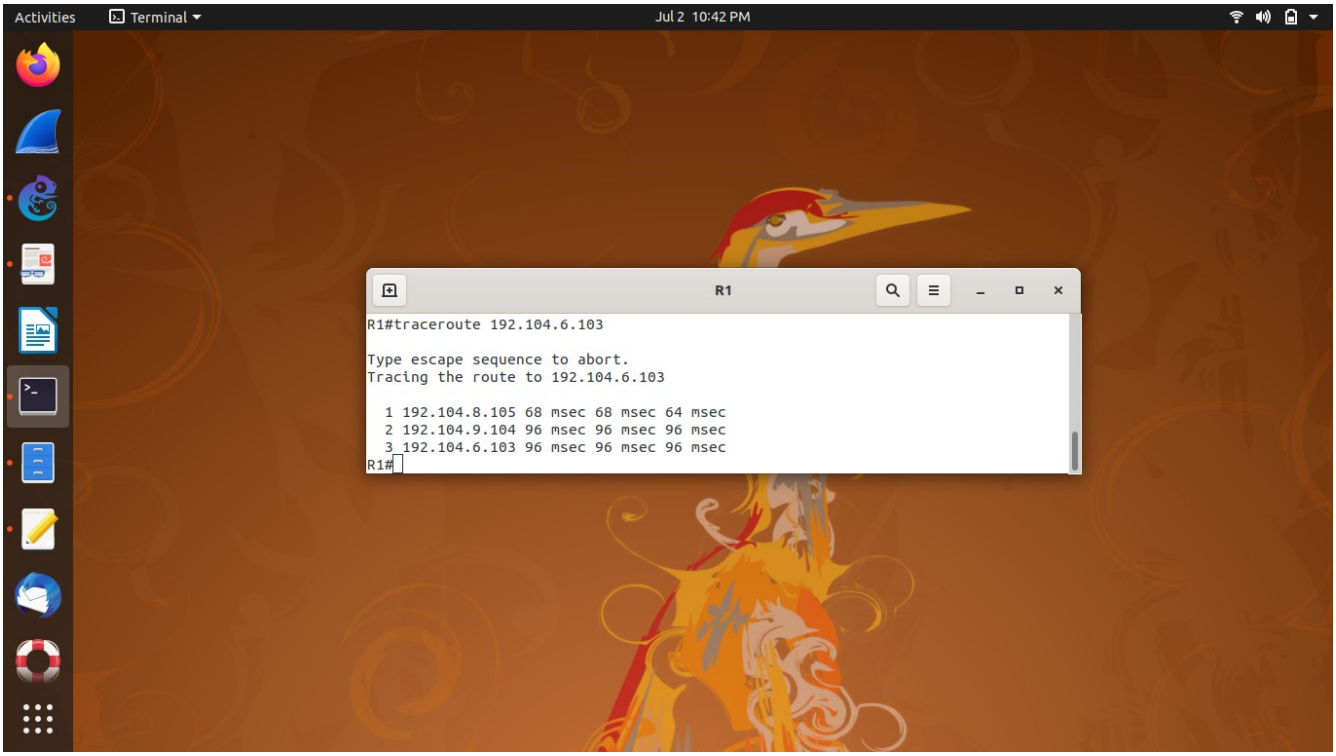
Traceroute :-

1) From R1 to R4's 192.104.7.104 :-



As the path to reach R4, via 192.104.2.102, 192.104.4.103, 192.104.6.104 is broken due to 192.104.4.103 not there(that is, network 4 is shutdown), so, the only other path is through 192.104.8.105 and then, through 192.104.9.104, to reach R4, which is directly connected to 192.104.7.104.
This is still the shortest path, that would have been got in the last assignment, that reaches R4 in 2 steps.

2) From R1 to 192.104.6.103:



As the path to reach R3, via 192.104.2.102, 192.104.4.103 is broken due to 192.104.4.103 not there(that is, network 4 is shutdown), so, the only other path is through 192.104.8.105 and then, through 192.104.9.104, and then, through 192.104.6.103 to reach R3.
Thus, this is a is a different path of 3 steps than previous assignment, which used 2 steps to reach 192.104.6.103 via network 2.