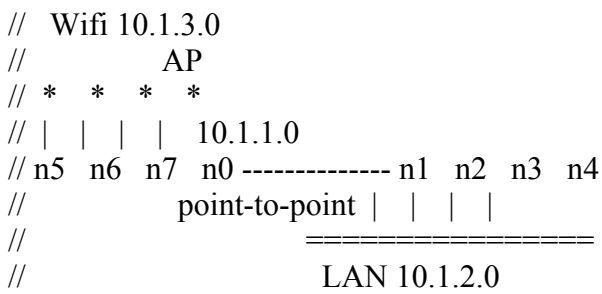
I. Create a topology of 8 nodes (n0, n1, n2, n3, n4, n5,n6,n7), as shown in figure below:



Generate appropriate data from the nodes. Calculate average throughput and delay in the network. Use a Flow monitor to monitor losses at n2. Draw a graph of percentage loss as a function of time for the duration of simulation.
Give an explanation for results you find.

II. Setup a 5x5 wireless adhoc network with a grid. You may use examples/wireless/wifi-simple-adhoc-grid.cc as a base.

1. Use flooding approach to send data from source to sink.
2. Setup three UDP traffic flows, one along each diagonal and one along the middle (at high rates of transmission).
3. Setup the ns-3 flow monitor for each of these flows.
4. Now schedule each of the flows at times 1s, 1.5s, and 2s.
5. Now using the flow monitor, observe the throughput of each of the UDP flows.
6. Now repeat the experiment with RTS/CTS enabled on the wifi devices.
7. Show the difference in throughput and packet drops if any.