OUTPUT

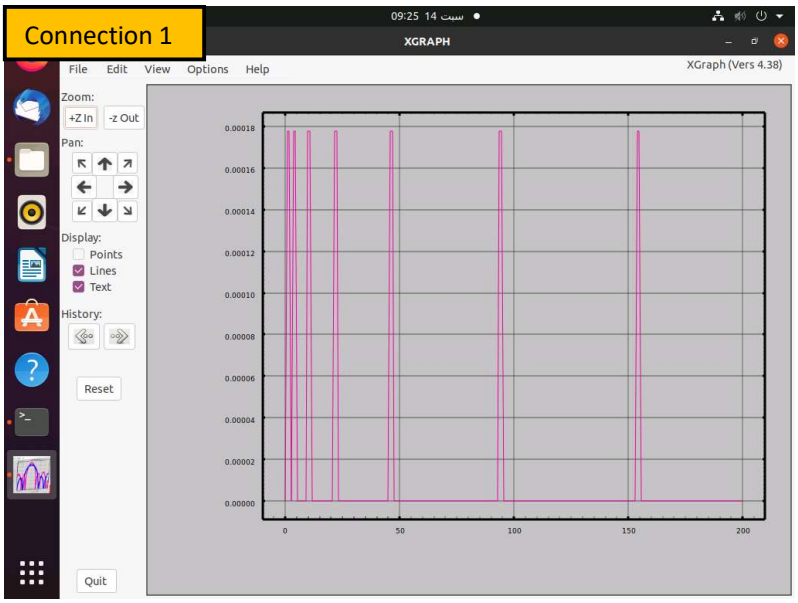
Q1

Simulate the given network for 200 sec and plot the graph of the following: a) TCP throughput Vs Simulation time (for every 50secs). b) TCP packet delays Vs Simulation time (for every 50sec) c) Packet loss Vs Simulation time (for every 50sec) For each link, data rate and propagation delay are given.

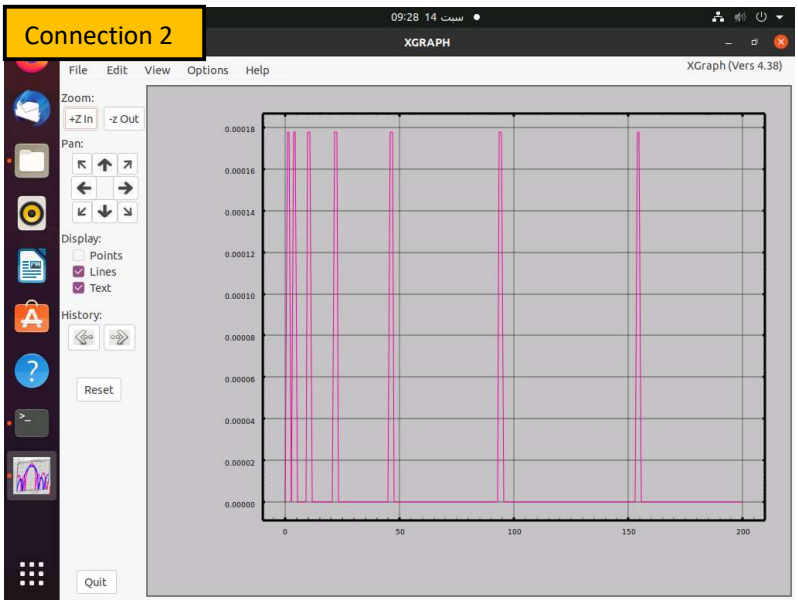
Do note: In this simulation, node 0 has been linked to node 4 as an ftp connection 1 (agent1 - sink), while node 1 has been linked to node 5 as ftp connection 2. (agent2 – sink2) Both agents have same priority.

Q1) a : TCP throughput Vs Simulation time (for every 50secs)

Connection 1

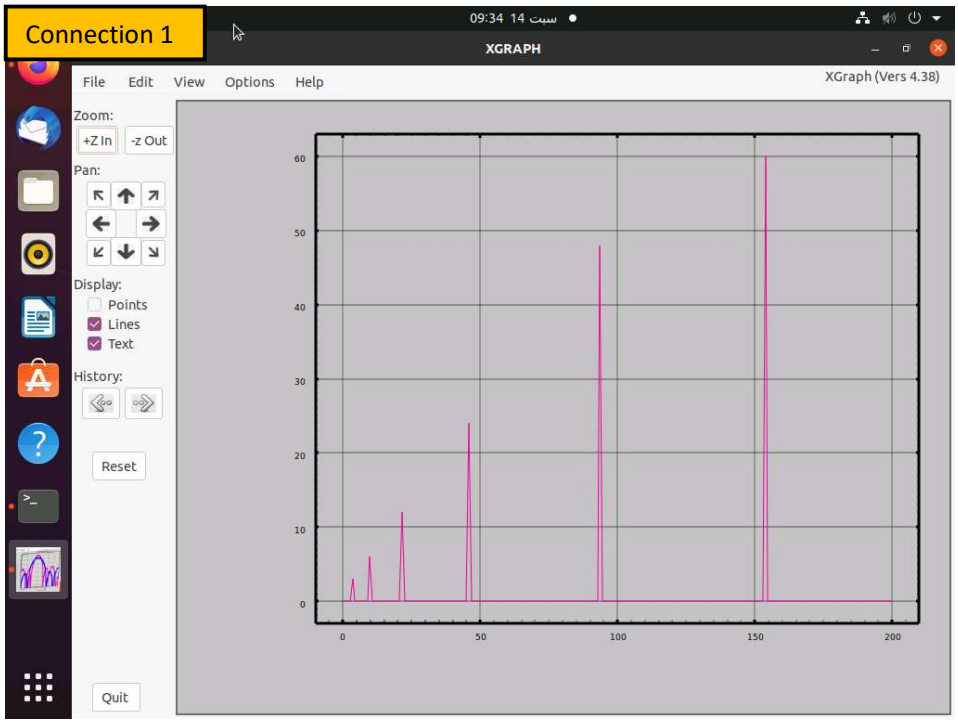


Connection 2

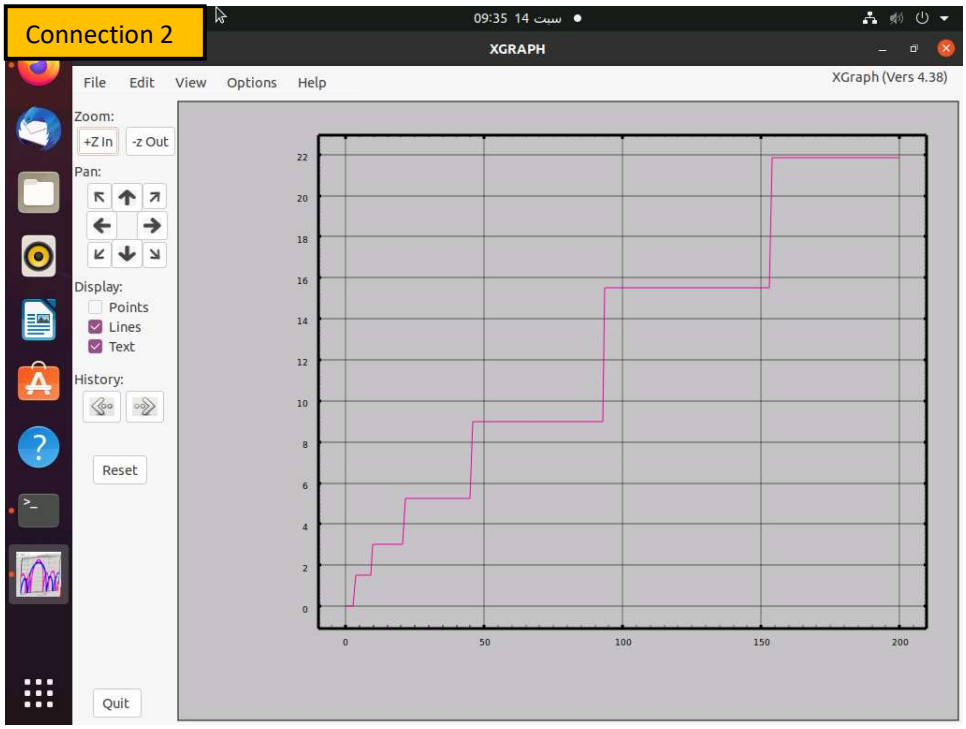


Q1 (b) TCP packet delays Vs Simulation time

Connection 1



Connection 2



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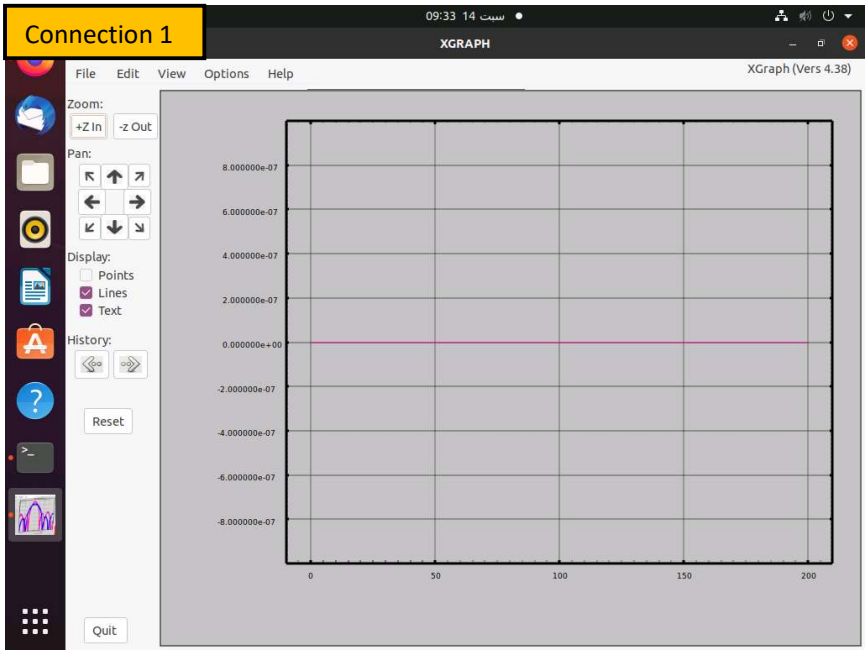
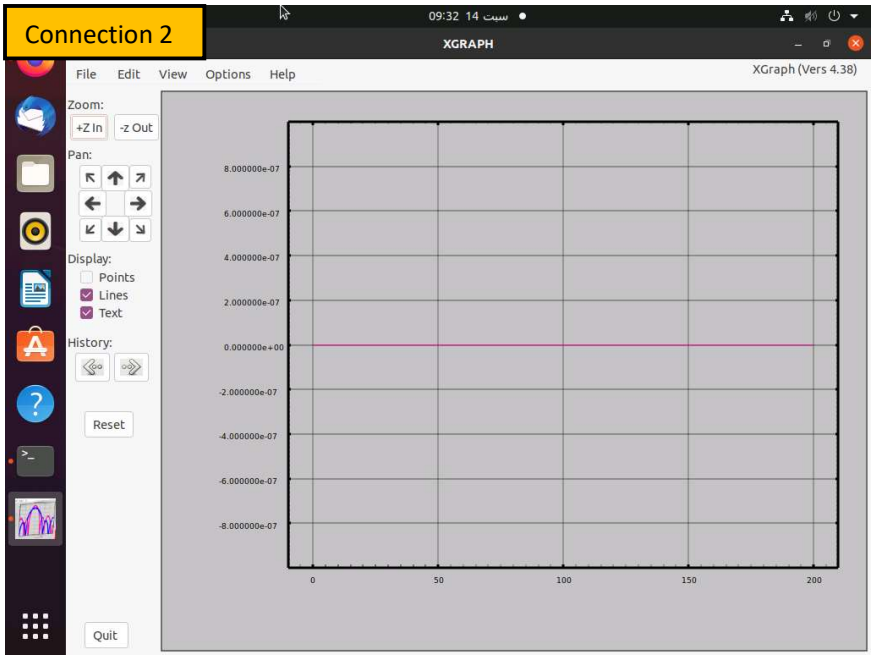
Q1 (C) : Packet loss Vs Simulation time

Connection 1



Connection 2



(DO SCROLL DOWN)

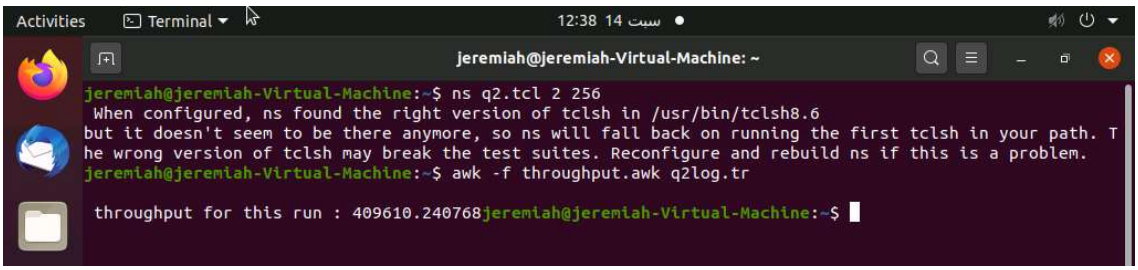
Q2)

Simulate a mesh network with N nodes. The nodes are numbered sequentially started from 1. The odd numbered stations are sources and even numbered nodes re destinations. Assume that the all source nodes have UDP data from the starting of the simulation till the end of the simulation. Find the performance of the network in terms of throughput for the following cases. Constant size UDP packets, varying N=2, 5, 10 and 15

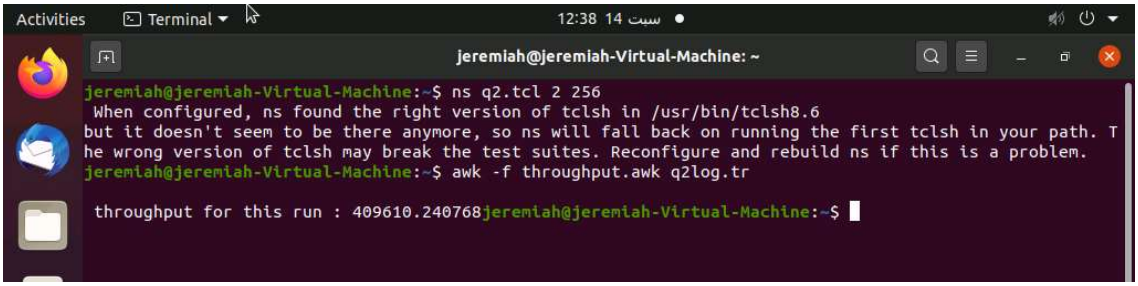
A) Constant size UDP packets, varying N=2, 5, 10 and 15

Constant Packet Size Chosen: 256 bits

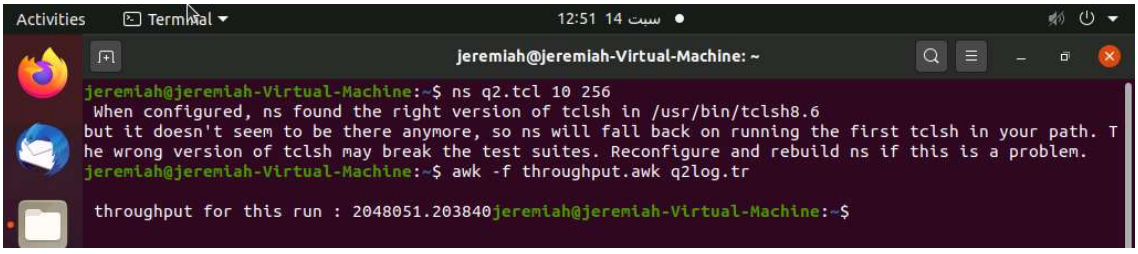
- **N=2:-**



- **N =5:-**

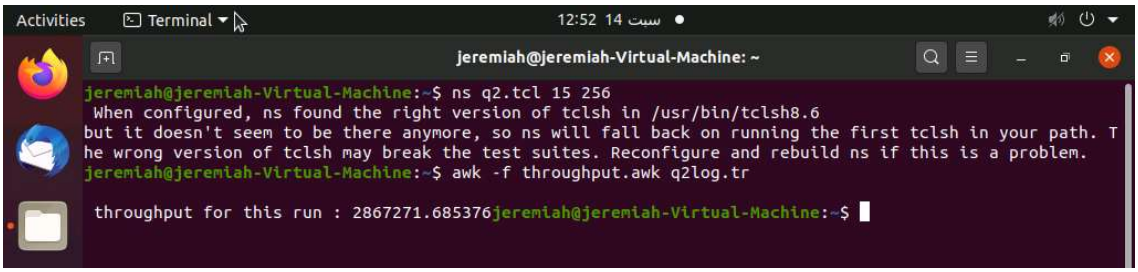


- **N =10:-**



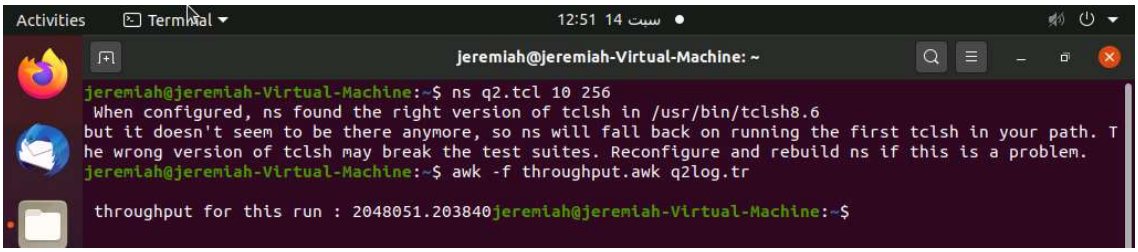
(DO SCROLL DOWN)

- **N=15:-**

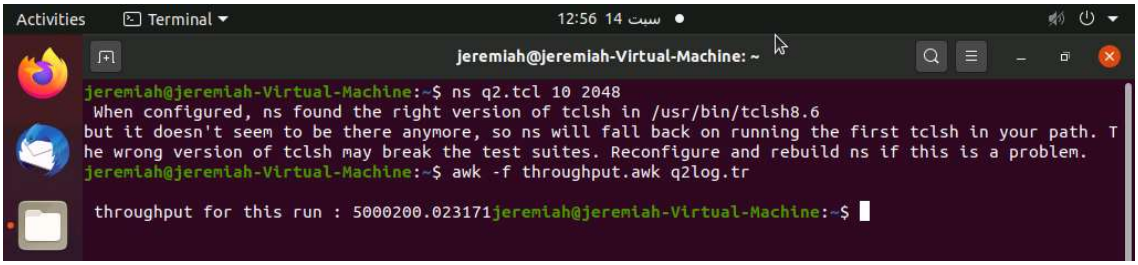


b) N=10, varying packet sizes of 256 bits, 512 bits, 2048 bits, and 8192 bits

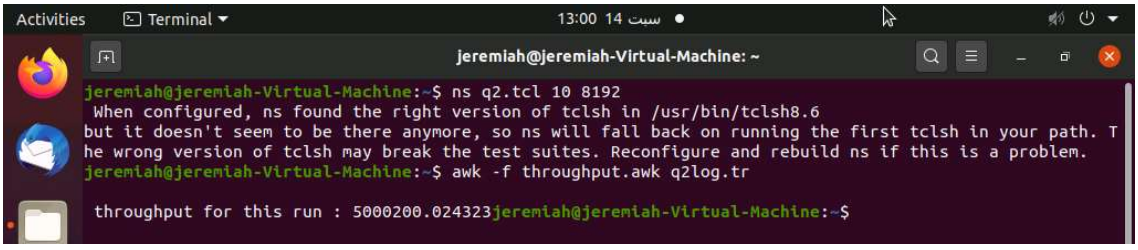
- **256 bits:-**



- **2048 bits:-**



- **8192 bits:-**



THANK YOU!