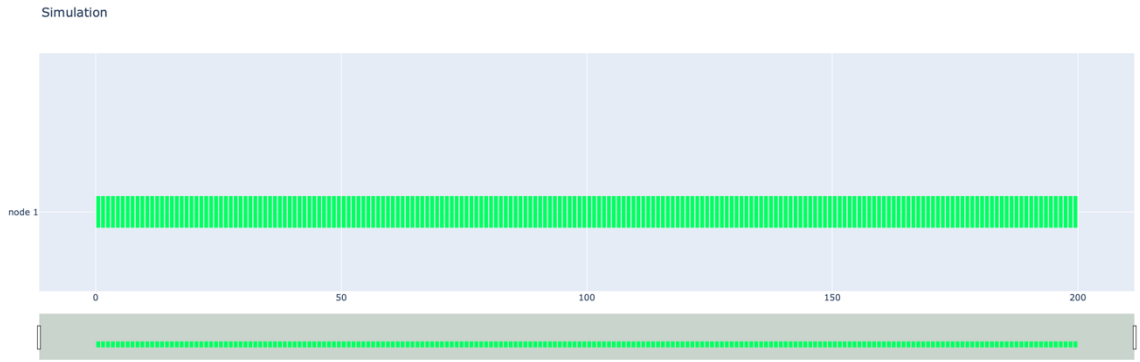
This is not related to task 2.1? – 20

**2.i**: A collision can happen, if several nodes try to send data in the same time slot. At the end of time slot, acknowledgement that is missing indicates a collision. After the collision, a node must have to wait for an interval.

**2.ii**: We Implemented a simulation for the communication of multiple nodes, which adheres to the protocol as defined in the question. It outputs a detailed log about what happens in each time slot, including information about retransmissions, queue length, etc.

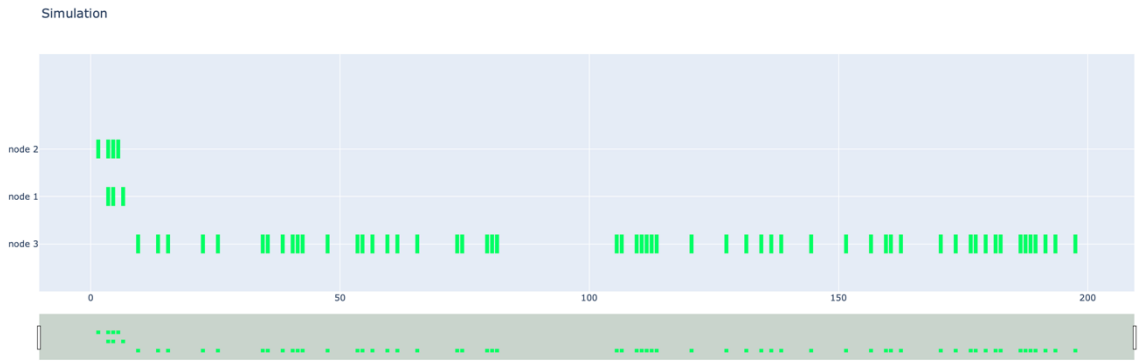
**Testing our simulation with the following parameters**:

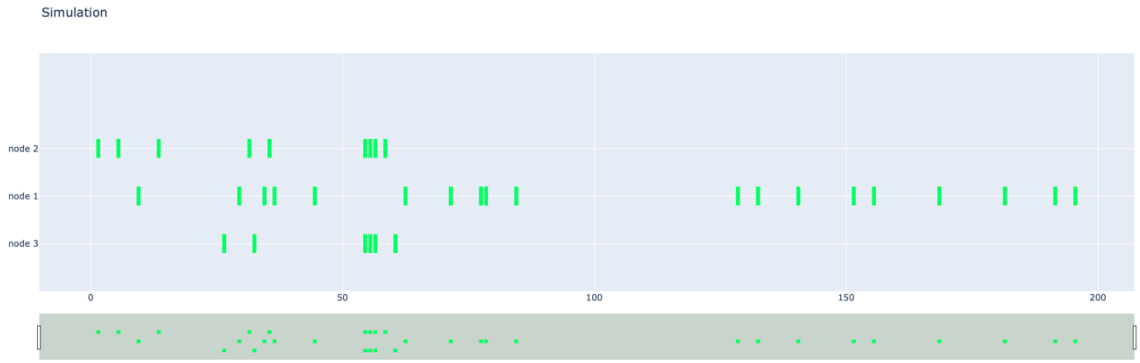
1. for; t = 200;N = 3; p1 = 1; p2 = p3 = 0
2. for; t = 200;N = 3; p1 = p2 = p3 = 0:5
3. for; t = 200;N = 3; p1 = p2 = p3 = 0:3
4. for; t = 200;N = 3; p1 = p2 = p3 = 0:1





Why is the complete 200 slots?



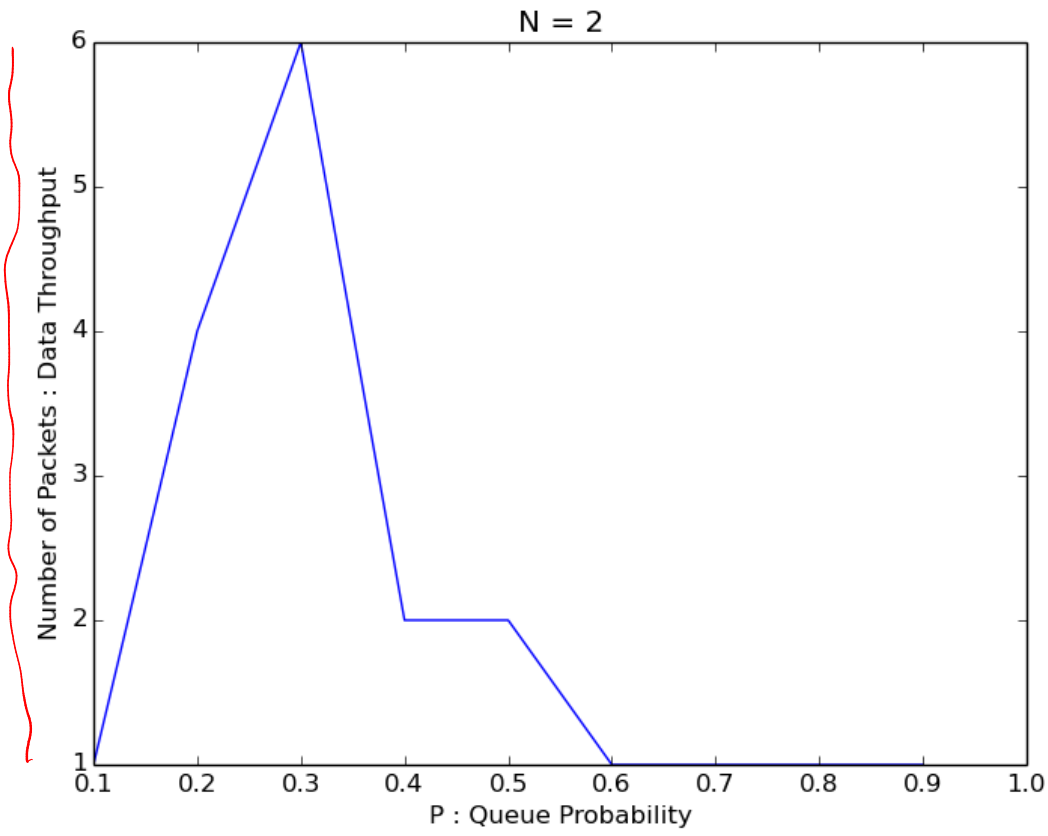



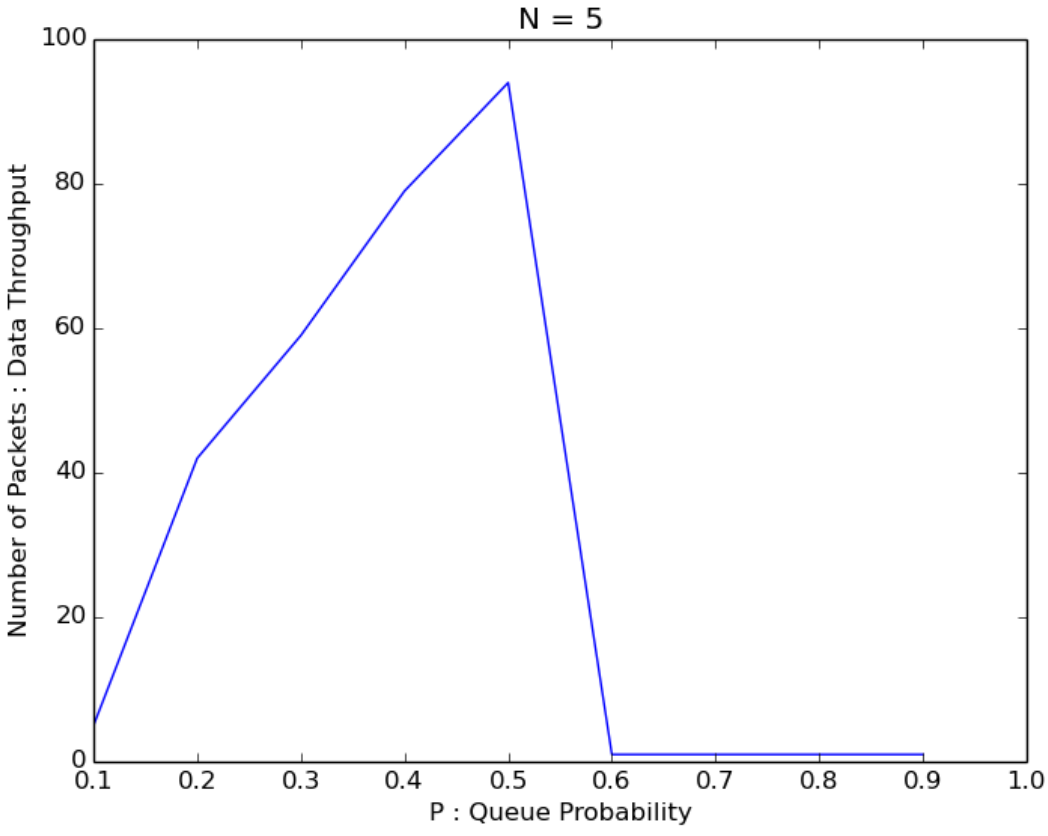

– 5 We cannot see retransmit, queue length etc.
– 10 No interpretation

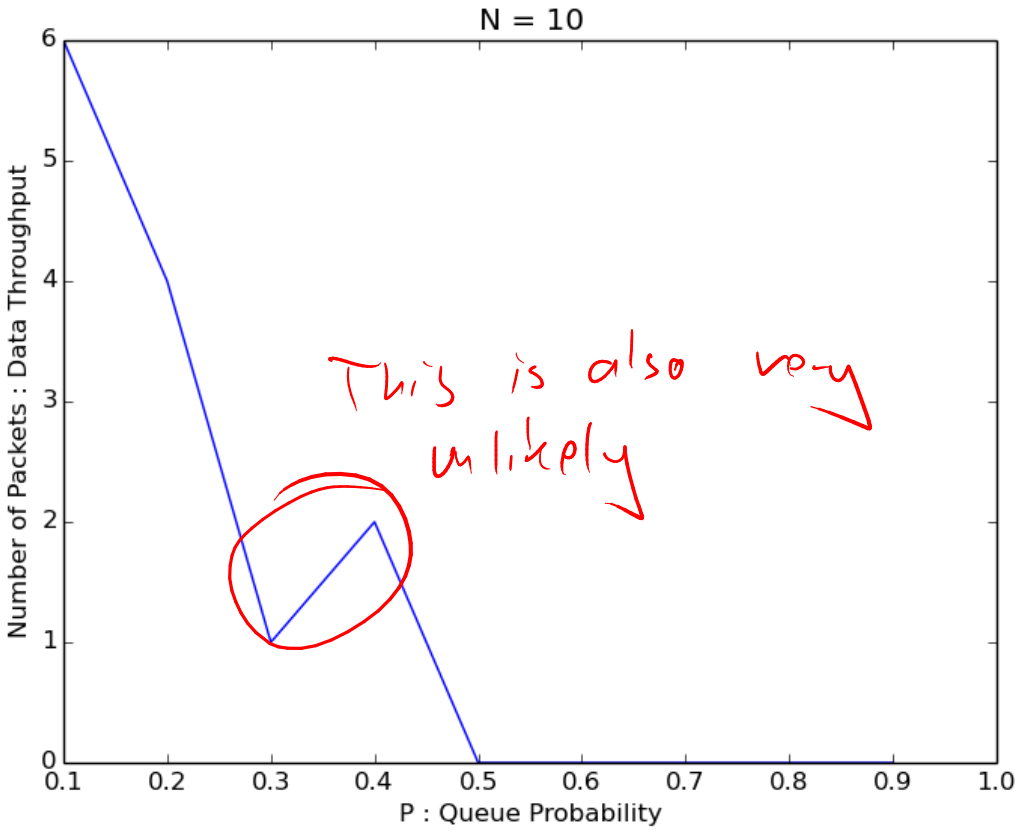
2.iii: Created a series of XY plots which show the achieved user data throughput depending on the queue probability. Use the following parameters:

1. For t = 1000;N = 2 we get
2. For t = 1000;N = 5 we get
3. For t = 1000;N = 10 we get

this seems wrong!






-10 Broken simulation / Plots, no interpretation!

25/70

Use one PDF file!