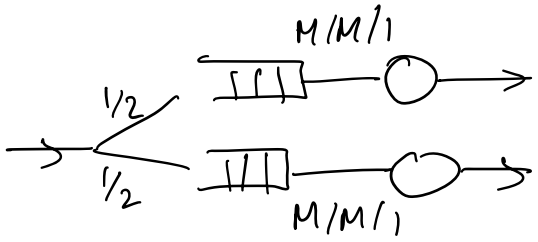
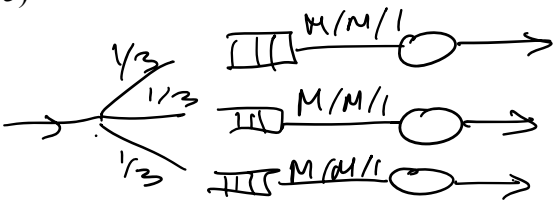
BLG517E-Modeling and Performance Analysis of Networks, Spring 2023
TakeHome Midterm, due on Apr. 25, 2023.

You are expected to prepare a paper presenting the performance of given queueing systems.

The queueing systems should be:

1) M/M/1
2) M/M/2
3) M/M/3
4) 

5) 

6) M/M/1/m
7) M/M/2/m
8) M/M/3/m

Arrival rate should be the same for all scenarios. Let's say 120 packets/sec according to Poisson distribution.
By varying the service rate (forming fast/medium/slow scenarios) and the buffer space for the loss systems, you should compare the performance of these queueing systems in terms of delay and loss rate.
Think about interesting/impressive ways of presenting your results.

The paper should have four sections: 1. Introduction, 2. Queueing Systems Studied, 3. Performance Evaluation, 4. Results. Each section should be as **descriptive** as possible in terms of the technical details, results obtained, and the other issues. Special attention should be paid to the conclusion section..

You should prepare your manuscript using the IEEE conference paper template (given at https://www.ieee.org/conferences/publishing/templates.html). Your manuscript should not be longer than four pages.

You are expected to upload your paper to Ninova before April 25, 11.30 pm.
Let me remind that this is **not a group work**. Each student should work **individually**!
You may give **references** when necessary.
Good luck!