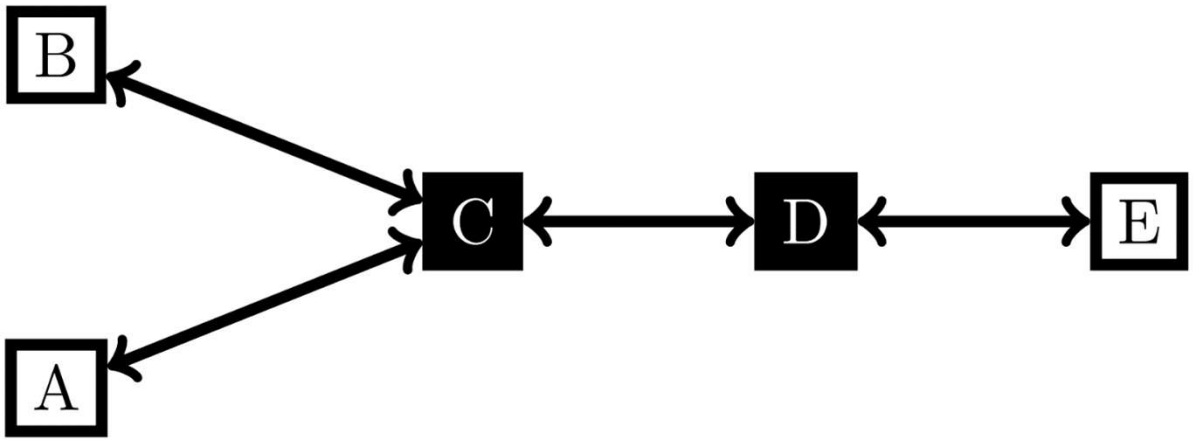
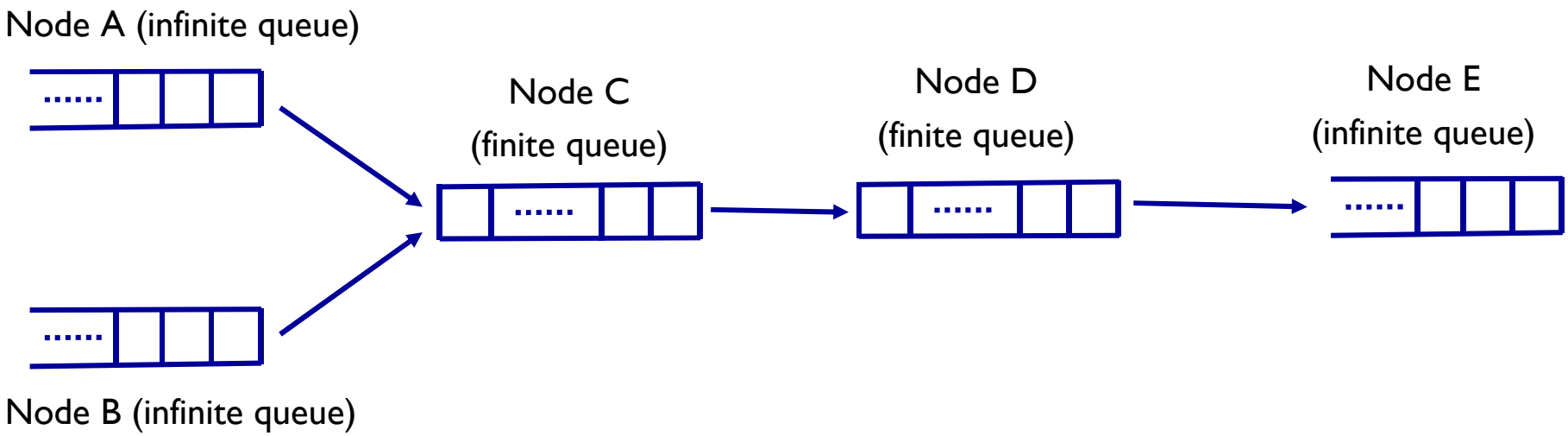
Lab Assignment 1

Discrete Event Simulation



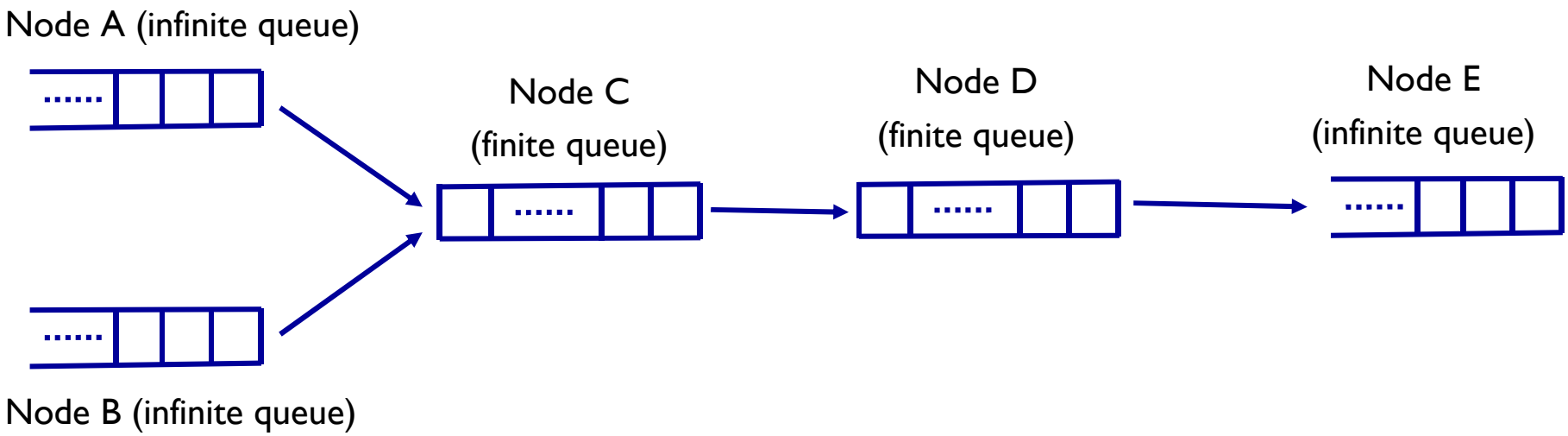
Topology for question 6

Each node has a queue



Two major operations: Enqueue & Transmit

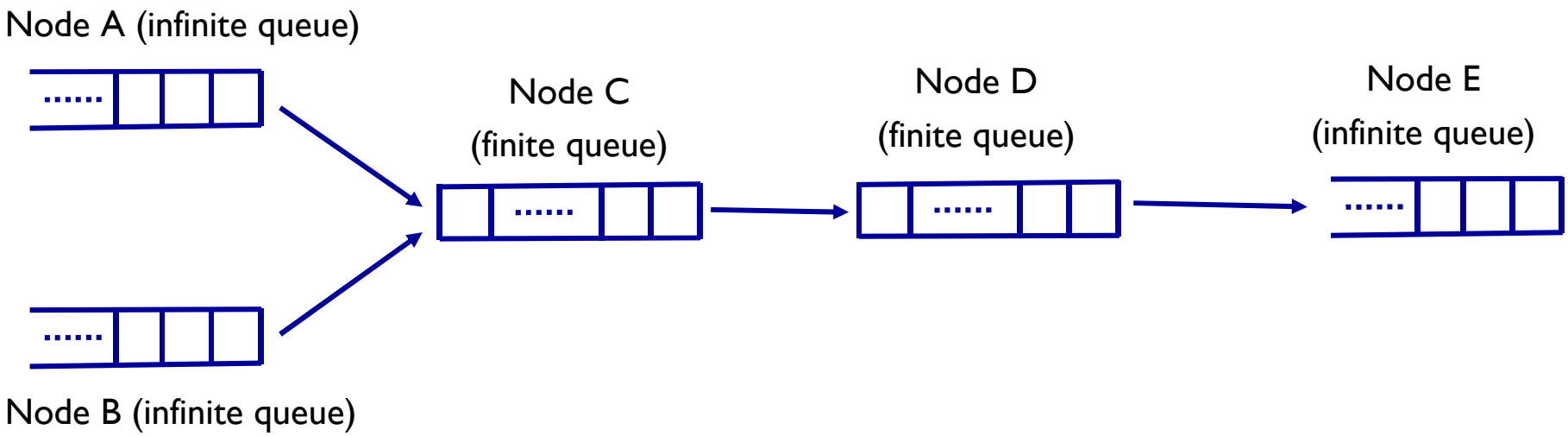
Each node has a queue



Transmit:

- Check if there is any packet in queue
- Pop HOQ if not retransmitting
- Compute the link delay and schedule enqueue for the recipient node

Each node has a queue



Enqueue:

- If the queue is empty, enqueue and schedule a transmit
- If the queue is full, drop the packet (only for nodes C and D)
- If the queue is neither empty nor full, enqueue
- Schedule a transmit for the sender (if exists) of the packet
  - Use a parameter indicating if the sender needs to retransmit
  - Compute link delay for ACK/NAK

Keep track of times for each packet as you schedule events.

You are not required to follow the instructions presented in this document.

Need help with coding/Python syntax? Let me know!