Queue – Study Questions

- What does LIFO mean?
- How is LIFO related to the ordering of the items in a queue? Think about what happens to the data if it is all enqueued and then dequeued.
- Describe two applications of the queue data structure.
- Write pseudocode for an algorithm that takes a string *s* as input and uses a queue to generate all possible binary strings in Breadth First Search, until it produces the input string.
- What is a deque?
- What is a priority queue?
- What is the complexity of dequeue()? enqueue()? front()? size()? isEmpty()?
- Write a C++ implementation of enqueue() in a linked-chain implementation of queue
- Write a C++ implementation of dequeue() in a linked-chain implementation of queue
- How would we define the back of the queue in a circular-array implementation? Where would we start it and and how is it updated after each enqueue operation?