**Queue**

# Queue: (first in first out)

1. Objects are always pushed onto the back of the queue
2. The front of the queue is the object that was least recently pushed onto the queue, and
3. When an object is popped from the queue, it erases the current front of the queue.

# Applications:

1. Grocery stores, banks, and airport security
2. The SSH Secure Shell and SFTP clients
3. Web Servers, databases, mail servers, printers, etc.
4. Breadth-first traversal of a tree (queue)
   1. Create an empty queue and push the root directory onto the queue, then
   2. While the queue is not empty:
      1. Pop to the front directory off of the queue, and
      2. Push all of its sub-directories onto the queue

# Implementation:

1. singly linked list
2. circular array