Overview:

The application we build is a simple Hot Dog stand which gives the user the ability to purchase hot dogs along with chips and drinks. The main menu of our application consists of the following options:

1. Take order
2. Display current order
3. Take payment
4. Serve order
5. Display all menu items
6. Exit

The goal is to demonstrate the implimentation of queue data structure. A Queue is a linear structure which follows a particular order in which the operations are performed. The order is First In First Out (FIFO). A good example of a queue is any queue of consumers for a resource where the consumer that came first is served first. The difference between stacks and queues is in removing. In a stack we remove the item the most recently added; in a queue, we remove the item the least recently added.

We implement a link-based queue where instead of enqueue() and dequeue() we use add() and pop().

Implementation:

* The user initiates an order by selecting a hotdog, beverage and chips.
* Each selection is stored in a separate list.
* A node of all 3 lists is created and pushed into a linked queue.