Stack and Queue EXERCISES

Work with your neightbor.

```
class Node:
    def __init__(self, value):
        self._value = value
        self._next = None
```

```
class LinkedList:
    def __init__(self):
        self._head = None

    # add a node to the head
    def add(self, new):
        new._next = self._head
        self._head = new

    # remove a node from the head
    def remove(self):
        assert self._head != None
        node = self._head
        self._head = node._next
        node._next = None
        return node

    # returns True if the list is empty
    # and False otherwise
    def is_empty(self):
        return self._head == None
```

1. Using the `LinkedList` and `Node` class definitions above, write the `Stack` class using a linked list for the underlying representation.

2. Implement a queue with a Python list. Make the front of the queue the last item in the list.

```
class Queue:
    def __init__(self):


    def enqueue(self, item):




    def dequeue(self):
```