

## CSE143 Section #4 Cheat Sheet

Queues should be constructed using the `Queue<E>` interface and the `LinkedList<E>` implementation:

```
Queue<String> q = new LinkedList<>();
```

Stacks should be constructed using the `Stack<E>` class (there is no interface):

```
Stack<String> s = new Stack<>();
```

For `Stack<E>`, you are limited to the following operations (no iterator or `Foreach` loop):

```
public void push(E value) // push given value onto top of the stack
public E pop()           // removes and returns the top of the stack
public boolean isEmpty() // returns whether or not stack is empty
public int size()        // returns number of elements in the stack
```

For `Queue<E>` you are limited to the following operations (no iterator or `Foreach` loop):

```
public void add(E value) // inserts given value at the end of the queue
public E remove()        // removes and returns the front of the queue
public boolean isEmpty() // returns whether or not queue is empty
public int size()        // returns number of elements in the queue
```