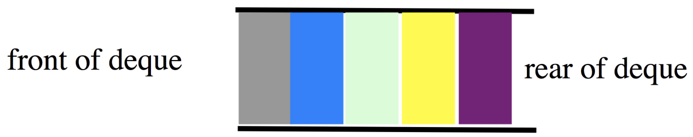
L3 SUMMARY

1) Brief review of stacks and queues, and their implementation using arrays and lists
2) A third linear ADT: double-ended queue (deque)



Create an empty deque
push/ pop at front
inject/ eject at the rear

3) Data structure design problem: a stack with an additional operation: `min()`

- solved by having an additional stack for the minimum items...
- extend to support both `min` and `max`?
- extend to support `min`, `2nd-smallest`, `...`, `kth-smallest`?
- what about for queues?

4) Data structure design problem: find the tallest person in a class-room

- when operations are `enter`, `leave`, and `tallest`
- when no-one may leave...

5) Data structure design problem: *priority queues* that support the operations `insert`, `min`, and `deleteMin`
6) The `Comparable` Interface in Java: parsing the sentence

```
public class MinStack<C extends Comparable<? super C>>{
```