Stacks

Exercises

1- Implement two stacks in one array. Support these operations:

```
push1() // to push in the first stack
push2() // to push in the second stack
pop1()
pop2()
isEmpty1()
isEmpty2()
isFull1()
isFull2()
```

Make sure your implementation is space efficient. (hint: do not allocate the same amount of space by dividing the array in half.)

Solution: TwoStacks

2- Design a stack that supports push, pop and retrieving the minimum value in constant time.

For example, we populate our stack with [5, 2, 10, 1] (from left to right).

```
stack.min() // 1
stack.pop()
stack.min() // 2
```

Solution: MinStack