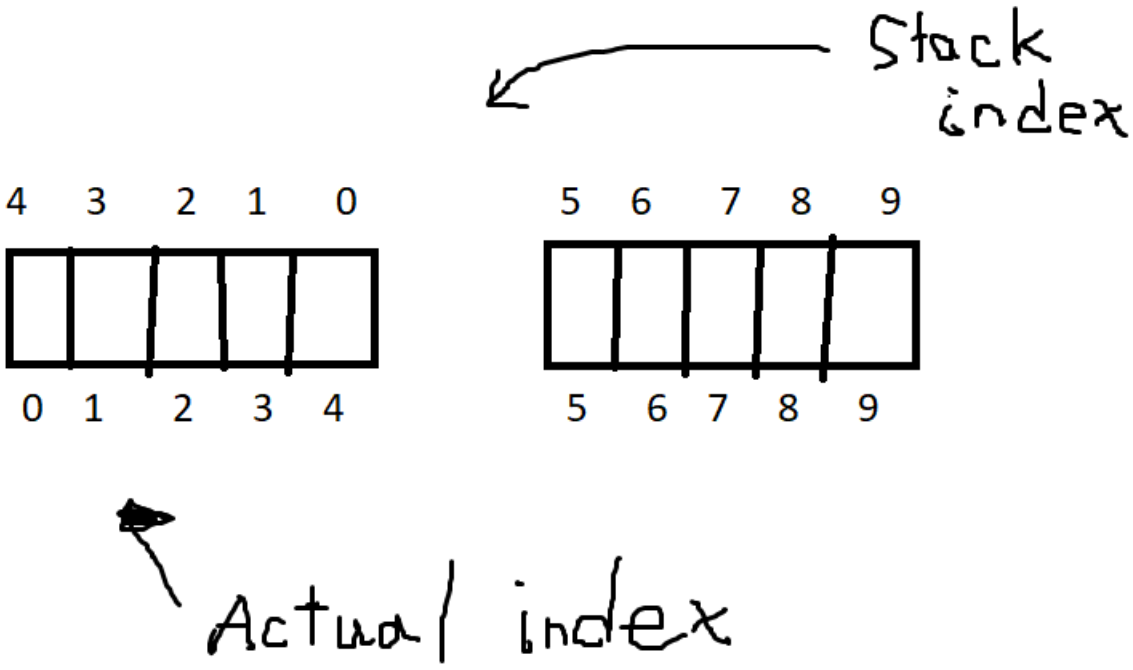
Exercise 1.3.48: Two stacks with a deque. Implement two stacks with a single deque so that each operation takes a constant number of deque operations (see Exercise 1.3.33)..

Background information: Recall a deque(or double-ended queue) is like a stack or queue but supports adding and removing items at both ends.

It consists of a few operations:
$Dequeue, isEmpty, size(), pushRight(Itemitem), popLeft, pushLeft(Itemitem), etc$

Solution: So essentially, 2 stacks w/ one representing pushes/pops on RHS while the other stack is for pushes/[p[s on LHS.



Pseudocode below:

```
//PseudoCode

stackA = [] // Gloval variables outside the main
stackB = [] //Global

a_start = 5
b_start = 0 //Global

void function pushLeft(int value):
    if (a_start<0)
        print("dequeue left is full")
        return

    stackA.insert(a_start,value)
    a_start--

function popLeft():
    if(a_start>9):
        print("stack is empty")
    stackA.pop(a_start)

function isStackAEmpty():
    return stackA.size() == 0

function stackA_size():
    return stackA.size()

//Do the same for stack_B
```