CS-2852 – Dr. Durant – Quiz 6
Spring 2014, Week 8

Complete the following table.

	LinkedList	ArrayList	SortedArrayList	Stack	Hash table
General complexity of add	$O(N)$ need to find an item	$O(N)$ need to move items	$O(N)$ need to move items	$O(1)$	$O(1)$ assume low load factor, or state other assumption
Restrictions on add (at end/specific position?)	None	none	None	top only	none
Complexity of search	$O(N)$	$O(N)$	$O(\log n)$	N/A	$O(1)$
Complexity of remove	either ck $\langle$ $O(N)$ for random $O(1)$ if iterate @ positions	$O(N)$ need to move items	$O(N)$	$O(1)$	$O(1)$ (can assume load factor is low)
Restrictions on remove (only from front of queue, etc.)	none	none	none	top only	none