

**CSC 18C Quiz #3 (25 pts) – May 3<sup>rd</sup>, 2016**

All answers must be of your own work. Type out your answers and submit your quiz through Blackboard for Quiz #2 as either a MS Word document or PDF file (Mac users using Pages, make sure to Export to MS Word).

1. **True / False:** The first item added to a stack is the first one removed. ( 4 points )

**FALSE:** Last In, First Out (LIFO)

2. **True / False:** A stack restricts access to its entries. ( 4 points )

**True:** You cant just access any item in the stack. (LIFO)

**Or else what's the point?!?!**

**(Section 5.1 in Data Structures Book)**

3. When you remove an item from a stack, you remove it from: ( 4 points )

- a. the top of the stack

**(Section 5.1 in Data Structures Book)**

4. Stacks exhibit which type of behavior? ( 4 points )

**c. last-in, first out (LIFO)**

5. Draw the resultant stack after the following operations: ( 5 points )

1. push(X):  $X \leftarrow$

2. push(Q):  $XQ \leftarrow$

3. push (Y):  $XQY \leftarrow$

4. push(M):  $XQYM \leftarrow$

5. pop():  $XQY \rightarrow M$

6. pop():  $XQ \rightarrow Y$

7. push(T):  $XQT \leftarrow$

FINAL STACK:

0	1	2
X	Q	T

Make sure to label the top entry of your stack after the last operation has been executed.