Friday, 21 September 2018

LAB DEMO 04

Own List Implementation

- Implement 'insertAtIndex', 'length' and 'findElement' methods

C++ STL queue, deque demo

- constructor
- Queue: front, back, push, pop
- Deque: front, back, push_back, pop_back, push_front, pop_front
- http://en.cppreference.com/w/cpp/container/queue
- http://en.cppreference.com/w/cpp/container/deque

PostFix expression

- InFix: A+B*C (human expression)
  - Multiply B and C, then add these product with A, return result (* > +)
- PostFix: ABC*+(computer way of parsing expression)
  - Scan from left to right, the moment we meet an operator (+,-,*...), take the last 2 operands and apply it on them (no precedence)!.
- LIFO logic, use a stack!

Homework

- Modify the post fix expression evaluation code to expressions which contain multi-digit numbers
- Example: 20 30 + 400 *
- Assume that each token (numbers or operators) are separated by space
- Can go find out how to convert InFix expression to a PostFix expression as well!

PS2 Status (less than 24hr left :O)

Name	A	B	C	D :O
Group A 3+4	AC	AC	AC	AC
Group B 9+13	AC	AC	AC	
Group C 1+0	AC	AC		
Group D 2+1	AC			
Have not tried: Group E 3+6				