Compiling Procedures Quick Reference
With help from Sahil Jain (Class of 2020)

Procedure Declaration - Compile the procedure declaration by:

1) emitting a procedure label
2) pushing the return value to the stack
3) setting up the procedure context
4) pushing the local variables to the stack
5) pushing the return address to the stack
6) compiling the statement
7) popping off everything that was pushed originally
    in this method in the reverse order
8) popping off all of the parameters
9) emitting an instruction to jump back to the return address
10) clearing the procedure context

Procedure Call - Compile the procedure call by:

1) compiling each expression corresponding to a parameter and
2) pushing the value of the expression onto the stack.
3) Repeat 1 & 2 above for each expression
4) emitting a jal to the procedure label

Make sure to use only emitPop and emitPush for performing all of the pushing onto and popping off the
Stack.