CPSC 326: Semester Project

MyPL REPL Specs

Goals:

- Type a MyPL expression into a prompt and print the result of the expression
 - o Remove requirement for main() function
 - Read in user input string and determine if lexically, semantically, and syntactically correct.
- Be able to define types and functions from the command prompt and use them
- (Bonus Goal) Run a mypl file as if they were being typed in

Plan:

- Add to the current command-line code entry and add a "--repl" tag
- Make a Java program to read the input, run it through all the checkers, generate the bytecode, then have the VM generate bytecode
 - Generate bytecode for function declaration
 - o Generate and run bytecode for basic input and Expression input
- Keep a running symbol table and TypeInfo object
- Handle a line being not just Stmts, but also ExprTerm if outside of a function declaration and print the result if that is the case
- Syntax Error on Return statements outside of functions
- (Bonus Goal) Have the "--repl" mode take in a file and run it as if it were being typed-in