

## **CS 280: Program #4**

Spring 2014

Due May 7, by 11:55pm, via Moodle

For this assignment we are expanding on assignment 3.

If you parse with no errors, then perform a semantic analysis on what you have parsed. For every error that you find, print an error message. The cases where the listed rules are violated are essentially rule 4 and rule 11.

If there are no semantic errors, perform an interpretation of the parse tree. Evaluate the input in the order in which it was parsed.

A set statement should result in performing an evaluation to determine the value of an expression and saving it in some manner associated with the identifier.

A print statement should result in performing an evaluation to determine the value of an expression and printing the value of the expression. Integers should simply be printed as integers. Quoted strings should be printed surrounded by quotation marks.

Your program should read the file whose name is passed as a command line argument, or the standard input if no command line argument is provided.

You may divide this assignment into as many files as you like. You MUST use p2lex.h from the prior assignments, with no changes.