

C- Semantic Analyzer

Class: CPSC 411

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Description: This program is used to do the semantic analysis of a syntax tree created by our previous assignment.

To Run the Program:

a. Download a3.zip and extract contents to your desired location.

b. Open Terminal/Command Prompt etc. and navigate to the now extracted "a3" folder using the "cd" command.

*Note that steps c and d are only required if the flex or bison files are changed.

c. Compile the flex file using the command

```
$ flex CM.flex
```

d. Compile the bison file using the command

```
$ bison -vd CM.y
```

d. Now you may execute the makefile for the program using the command

```
$ make
```

*Note: if any errors are encountered in this process execute the command "make clean" and then try again.

e. In order to execute on a text file use the command where "test.CM" is a stand-in for whatever C- file you wish to analyze

```
$ ./parser test.CM
```

f. The parser will now perform a semantic analysis of the code, and print out the relevant symbol table details and type checking results to the terminal

Notes:

This program fully implements the basic Assignment 3 requirements and has demonstrated an ability to match the sample input/output that was provided as well as several other examples. This program does not implement the bonus part.