Lab 5 Algol-C into YACC and LEX

Submit Assignment

Due Wednesday by 11:59pm **Points** 30 **Submitting** a file upload
File Types pdf, tar, and zip

Consider the definition of ALGOL_C from **HERE**

Your task is to create YACC and LEX routines which will PARSE (check syntax only) input that matches the language definition (read this is that your program should be able to take syntactically correct code and say yes, otherwise report errors giving at least the first line number).

Notes:
All boldface elements come from your lexer as a single character or as a TOKEN. For the ID token you need to set yylval.string=strdup(yytext).

If you have an optional rule like vardecl -> type ID ['[' NUM ']']

You should write this as

vardecl -> type ID | type ID '[' NUM ']'

If you have parms -> parm { ',' parm}

write this is parms -> parm | parm ',' parms YES make them right recursive

Requirements

1) Your code needs to emit an error (through STDERR) whenever there is a syntax error. It needs to emit the line number where the error occurs

2) Your code needs to emit through "stderr" the value of any constants that you come across.

Deliverables: A zipped folder that has all your working directory for lab5. If you miss including file(s) that stop the TA from executing your code, you will be penalized. Mainly, your zipped folder has to have:

1) Your well documented (with your name and date) YACC code

2) Your well documented LEX code

3) Your output when run with the code **HERE**

4) Your output when run with the code **HERE**

5) anything else that would show your code is working properly

6) Your Makefile

7) If your Makefile does not work or your program does not compile, the result will be 0.