

Assignment #Project

CS347

Date: 16th March 2017

Total 20 Points

Consider the grammar (**Section A.13**) attached to the mail.

The notation for the grammar is not strictly BNF (e.g. use of subscript "opt" with some symbols, use of "one of", etc.), so some rewriting may be necessary due to that.

Generate a parser using LEX and YACC for C language considering only the given grammar.

Input: C-program which may be correct or wrong syntactically.

Output:

1. If correct, then the program will be passed. The output will be simply "PASS"
2. If wrong, i.e. if the lexer is not able to recognize any token or the parser is not able to parse the input program, then the output along with the diagnosed reasons will be presented to the programmer.

Example of output for a syntactically incorrect program:

The output is "FAIL"

Line Number: 7 Parse errors

Or

Line Number: 6 *Token-name* Unexpected Token

Note: There could be some conflicts. Resolve these by any appropriate means.

Instructions:

1. Submission deadline: 30th March 2017.
2. Partial evaluation in each lab on progress will be done (3 labs in total).
3. The implementation should be done group-wise.
4. Each group must submit a single report (Both Hard Copy and Soft Copy) containing all the codes with proper comments and description and input-output result at the end of the report.
5. A separate page at the end must be attached explicitly mention the contributions (i.e. section/subsection numbers in report) of each member of a group.

Submission Steps for SoftCopy of the Report:

- Open 172.16.1.3/~halder
- Click on “Submission System”
- Use your own login and password.
- Create a directory with name “ProjectCS347” in your computer system.
- Put your report in the directory with named as “Report_groupid”. For example, “Report_G05.pdf”
- ZIP the directory to create “ProjectCS347.zip”
- Upload the zip by clicking on Upload button.