Scanner for C Language Proposal

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Proposal

Lex helps write programs whose control flow is directed by instances of regular expressions in the input stream. It is well suited for editor-script type transformations and for segmenting input in preparation for a parsing routine.

Using Lex we will design a lexical analyser for a subset of the C language.

- It will support nested while loops.
- It will support for the char and int datatype and its subtypes (short, long, default).
- It will read the character stream and return the appropriate tokens types.
- It will recognise keywords supported by the C language.
- It will support nested comments.
- Appropriate error messages will be returned.
- With the help of hash tables, symbol and constants table will be generated and maintained.
- Functions scanning will be supported.
- Error checking like unending strings, comments will be taken care of.
- The scanner output will be presented in accordance with the guidelines provided in the course plan.