

Example: Lexical Analysis Through Semantics

Note that whole point of the lexical analyzer in this case is to identify tokens. The calling program reads in a buffer of characters (lines of 80 characters or less). This string is passed to the lexical analyzer. As a debugging tool, each string will be printed when processed. Also comments as to success of failure shall also be printed.

It has been alluded that the syntax analyzer will actually be doing the calling, trying to acquire tokens. One feature that appears to be necessary is a common symbol table. Whether this symbol table is global, is simply referenced by both is something to be tested. There is a suggestion that makes sense. Pre-load the symbol table with all reserved words and symbols. All reserved words have a token type identical to its index in the symbol table. The suggested record structure is as follows:

- Name string
- Location
- Token Type
- Index of Token
- Constants
- Integer