Status Report

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This compiler is not complete. Lexical analysis and syntax analysis are completed. The parser, scanner, and tree are fully functional besides error handling. We do have a symbol table set up, but it is vulnerable to memory leaks. The semantic checking is close to completion and the code generation was started, but never completed.

(1.0) **Lexical Analysis**

1. Line numbering - Done

2. Two styles of comments - Done

(1.5) **Syntax Analysis**: grammar adjustments

1. Unlimited nesting of subprograms - Done

2. Array access on both sides of assignment - Done

3. Allow **for** statements. - Done

(2.0) **Symbol Table**

1. Memory-leak handler - No

(2.5) **Syntax Tree** (Intermediate Code Generation)

1. Visual print - Done

2. Memory-leak handler - NO

(3.0) **Semantic Analysis & Type Checking**

1. Check list - Part 1, 2, 3, 4 done, portions of parts 5,6

2. Error reporting - Done

(4.0) **Code Generation**

1. Input/Output statements - Not completed

2. Simple expressions (arithmetic and relational): gencode - Not completed

3. Statements (assignment, conditional, loop) - Not completed

4. Nonlocal names: base frame pointer (static scope parent) - Not completed

5. Recursive routines (example: GCD program) - Not completed

6. Complex expressions (register spilling) - Not completed