Project 2: Semantic Checker and Code Generator

COP4020: Programming Languages

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Running:

To run this program in Linux follow these steps-

- 1. Open a terminal and navigate to the directory holding the project
- 2. Run "make" in the terminal
- 3. Use the command "./main all" to run all files (a1-a8)
- 4. Use the command "./main inputFilesP2/a1" to run a specific file (to run a specific file, a directory must be specified)
- 5. RPN output will be stored in .rpn files

Error Messages:

- 1. "Expected 'begin' at the start of the program" This happens when a 'begin' token isn't detected at the start of the code.
- 2. "Expected 'end' after statements" This happens when a 'end' token isn't detected at the end of the code.
- 3. "Expected '.' after 'end' This happens when '.' isn't found directly after the 'end' token.
- 4. "Expected statement" This happens when a statement is expected.
- 5. "Expected identifier" This happens when an identifier is expected.
- 6. "Expected '=' after identifier" This happens when an '=' isn't found after an identifier.
- 7. "Expected ';' after expression" This happens when a ';' isn't found after an expression.
- 8. "Identifier cannot end with an underscore" This happens when an identifier ends with an underscore.
- "Identifier cannot contain consecutive underscores" This happens when an identifier contains consecutive underscores.
- 10. "Unmatched parenthesis in expression" This happens when an opening parenthesis doesn't have a matching closing parenthesis.
- 11. "Illegal redefinition 'identifier'" This happens when an identifier is redefined.
- 12. "Undefined variable 'identifier'" This happens when an identifier hasn't been defined but is attempted to be used.