Assignment 4

Documentation

**Implementation**

* https://github.com/aalexcampean/flcd-labs.git

**Documentation**

* Symbol Table
  + Implemented as a Hash Table with Separate Chaining using liked lists
  + Contains the identifiers and constants
* Program Internal Form
  + Implemented as a List
  + Contains ids and their position in Symbol Table (if it doesn’t exist = (-1, -1))
    - id = Identifier
    - const = Constant
    - reserved words
* How it works
  + The scanner parses the file
  + First, it splits the file by separators
  + Secondly, it is split by operators
  + Then the string constants (identified because they start and end with “) are concatenated as they were split by spaces in the previous steps
  + After the aforementioned steps are completed, all words and characters are identified as either an Operator, Separator, Reserved Word, Constant, or Identifier
  + If none of the cases are met, a lexical error is raised indicating the line it was found at
  + Finally, a St file and a PIF file are created where both are printed in a table format to illustrate the underlying representations