

Documentation

Source code

https://github.com/caprapaul/flcd/tree/lab_03

Symbol Table

Implemented as a hash table using an array of lists. The lists are used to handle collisions. A token can be added or searched for using `Position(token)` which returns the position of the token.

Program Internal Form

Implemented as a list of tuples. The first value of the tuple is the token and the second is the position. The position is `(-1, -1)` if the token is not a constant or an identifier.

Scanner

Implemented using regex. The scanner reads the input file line by line, removing any leading whitespace from the line and testing the line against some regex rules. If there is a match and the token is identified, the token is added to the PIF (and ST if it's a constant or an identifier), then it is removed from the line and the process repeats with the remaining characters of the line.

Classes

