Source code:

https://github.com/915-Motoc-Simona/FLCD/tree/main/Lab3

The Symbol Table is represented using a Hash Table.

PIF is a List of Pairs of the form (token, position), where position is:

- either another Pair representing the position of the token in the Symbol Table (bucket, position in bucket) – for constants and identifiers
  * also in this case, token will be either "id" or "const", not the actual token
- either -1 – for operators/ separators/ reserved words

The scanning algorithm takes each line of the program and tries to clasify each group of characters separated by space into one of the categories: numeric constant, char constant, string constant, identifier, operator, separator, reserved word, using pre-defined regex expressions. If a token cannot be clasified, it means there is a lexical error and the scanning algorithm stops with a corresponding message, otherwise it will go to the next token/ next line.