

# Lab 4 - Scanner Documentation

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The classes in the program are:

- Language Symbols class : this class' responsibility is to parse the tokens file and assign it to its' correct type : separator, operator or reserved words
- Hash Table class: this is the implementation for the Symbol Table, it uses a hash function to compute and place the tokens in the table with a hashing algorithm and uses a Linked List to avoid collision (more documentation on [Lab 3 - Documentation](#))
- Program Internal Form class: this is the output that denotes how the program looks like and has the reserved words, separators etc with an invalid position in the symbol table as well as the identifiers with their correct position
- Scanner: This class has a very intuitive name and that is what it does. It scans line by line the "boa" language and assigns each word to its correct type, uses regex to determine identifiers to constants and