Github: https://github.com/915-Narita-Andrei/FLCD-lab

Symbol Table

This was implemented using as data structure a Hash Table. The Hash Table is implemented using a list which will have on every positon a list of strings. This data structure has an "add" method, which based on a string will compute a hash value which will be used as a key and store on the list on that key-position. If multiple strings will lead to the same hash values, there is no problem since on each position from the list there is another list which can keep more than one element. And this is the way how collisions are solved.

The hash function has the following computations based on a string: It will sum up all the ascii codes of the characters from the string. The result will be the previous sum modulo size of the list of elements. We also prefer to have the size as a prime number in order to avoid hash collisions.