Github https://github.com/adabirtocian/Scanner_FLCD

Data structure:

Hash table with separate chaining

Collisions are solved by having linked lists, so the symbols that hash on the same value are added in a vector one after the other.

Hash function: sum of ascii codes modulo hash table size

Constructor

- Initial size of the hash table is 100

void add(string symbol)

- Precondition: symbol should be string
- Postcondition: symbol is added if not already in the symbol table
- Checks is the symbol was already added and adds it if not

int find(string symbol)

- Precondition: symbol should be string
- Postcondition: -1 if the symbol is not in the symbol table; index where it is found
- Return the exact position inside the symbol table
- For each chain there are maximum 10 symbols that can be added so the real position is computed based on the hash value and the index in the linked list