RAUL MOGOS - lab2 -flcd

https://github.com/raulmogos/compiler-design/tree/main/lab2

HashMap:
    members:
        list: List<LinkedList<String>>
        size: int

    methods:

        public HashMap(int size)
            PRECONDITIONS: int > 0
            POSTCONDITIONS: none
            DESCRIPTION: creates an instance of HaspMap with the give size

        private int hash(String s)
            PRECONDITIONS: s of type string
            POSTCONDITIONS: none
            RETURN: int
            DESCRIPTION: calculates the the hash as: (c1 + c2 + ... + cn) % size
                add all the chars ascii values and then mod size

        public void add(String s)
            PRECONDITIONS: s of type string
            POSTCONDITIONS: none
            RETURN: void
            DESCRIPTION: adds the string in the hashmap if it does not exist, else
it won't be added

        public int getIndex(String s)
            PRECONDITIONS: s of type string
            POSTCONDITIONS: none
            RETURN: int
            DESCRIPTION: gets the index of the given string s if it is in the
hashmap, else -1

SymbolTable

    members:
        SIZE: int;
        hashMap: HashMap;
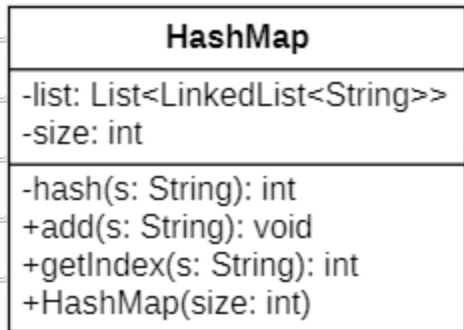
    methods:

        public SymbolTable(int size)
            PRECONDITIONS: int > 0
            POSTCONDITIONS: none
            DESCRIPTION: creates an instance of SymbolTable with the give size

        public SymbolTable()
            DESCRIPTION: creates an instance of SymbolTable with the default size

        public void insert(String s)
            PRECONDITIONS: s of type String
            POSTCONDITIONS: none
            DESCRIPTION: adds a string in the symbolTable

        public int getIndex(String s)
            PRECONDITIONS: s of type String
            POSTCONDITIONS: none
            DESCRIPTION: get the index of that string s, else -1

HashMap

-list: List<LinkedList<String>>
-size: int

-hash(s: String): int
+add(s: String): void
+getIndex(s: String): int
+HashMap(size: int)

SymbolTable

-hashMap: HashMap
-SIZE: int

+SymbolTable()
+SymbolTable(size: int)
+insert(s: String): void
+getIndex(s: String): int

+has a