

<https://github.com/fragN7/CS-Work/tree/main/5thSemester/Formal%20Languages%20and%20Compiler%20>

The Symbol Table implements a list of Hash Tables, which is used for both identifiers and constants. The Hash Table is a simple hash table with linked list collision resolution. Additionally, the Cell class is implemented to act as a Pair class.

The Symbol Table has the current methods:

put(String key, Object value) {} - acts as the 'add' function by calculating the index using the hash function and inserting it in the correct table using the put method from the Hash Table implemented

hash(String key) {} - simple hash function which gets the length of the key and maps it to the size of the Symbol Table

The Hash Table has the current methods:

put(K key, V value) {} - inserts a key-value pair into the hash table, updating the value if the key already exists. get(K key) {} - retrieves the value associated with the given key from the hash table, or returns null if the key is not found. keys() {} - returns an iterable collection of all the keys stored in the hash table.

Cell(K key, V value) {} - initializes a cell with a key-value pair. getKey() {} - retrieves the key associated with the cell. getValue() {} - retrieves the value associated with the cell. setValue(V value) {} - updates the value of the cell with the provided value.