

<https://github.com/spathula/flcd>

Symbol Table

For the symbol table I have chosen to implement a Hash Table. The hash table is represented as a list of lists, so there are no conflict problems. The hash table is created with an initial capacity of 7 positions.

The 'add' function checks first if we should extend the table's capacity, otherwise it will calculate the hash function for the current token and add on the corresponding position.

The 'get' function returns a Pair item that contains the position of the list in which our item resides, and its position in that particular list.

The 'extendTable' function creates a new table with doubled capacity, and recalculates the new position for each element.