The Symbol Table ADT is implemented with a Hash Table.

The hashing function will sum up all the ascii codes of each character and the hash value will be the modulo between the sum and the number of buckets.

The function to add an element will first check whether the element is not already in the Symbol Table. If the element exists, return its position, otherwise assign it the next position and add it to the hash table and then return its position.

Collisions will be resolved by having a linked list as the value instead of a single value. Meaning that all the elements that have the same hash value will be added to that list.

The position is an integer starting from 0 that gets incremented by 1 at each add.