Lab 2

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<https://github.com/Mihaitron/FLCD_RETAKE>

The Symbol Table is unique for identifiers and constants. It was implemented using a hash table with open addressing, with quadratic probing as collision resolution.

The table starts with an initial capacity of 8 (which is a power of 2) and is resized when the maximum capacity is reached upon adding a new element in it.

Integer h(String k, Integer i)

Hashes a string to a position in the table.

* preconditions:
  + k is the string to be added in the table
  + i is the probing number
* postconditions:
  + result is the position of the string in the table

Integer search(String value)

Searches for a string in the table.

* preconditions:
  + value is a string to be searched for in the table
* postconditions:
  + result is the position if the value is inside the table
  + result is -1 if the position is not inside the table

Integer add(String value)

Adds a string in the table. If capacity is reached, it resizes.

* preconditions:
  + value is a string to be added in the table
* postconditions:
  + result is the position of the value inside the table