

## Lab 2

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Github: <https://github.com/toadereandreas/Formal-Languages-and-Compiler-Design>

HashTable has the following methods:

```
'''
The method hashed the given key
Input: @key - a string
Output: integer
'''
def hash(self, key):
```

```
'''
The method adds the given key to the hashtable if it does not exists. If it exists it returns the
existing one
Input: @key - a string
Output: None, if it did not exist already
        True, if it already existed
'''
def add(self, key):
```

```
'''
The method determines if the given key exists
Input: @key - a string
Output: True if it exists
        False otherwise
'''
def search(self, key):
```

```
'''
The method returns a pair if the key exists or (-1,-1) if it does not
Input: @key - a string
Output: (int,int) - a pair of integers
'''
def position(self, key):
```

SymbolTable has the following methods:

```
'''
The method adds in the hashtable the given key if it does no exist.
If it does, it returns what is already there
Input: @key - a string
Output: a pair
'''
def position(self, key):
```