**Lab 02 – DOCUMENTATION**

* Symbol Table (ST) implementation as a *HashTable*, with the corresponding operations
* *Implementation language:* JAVA

**HASH TABLE IMPLEMENTATION**

* Use a *Map <Integer, ArrayList<String>>*
* *Hash function:* 
  + sum of ASCII characters % n, where n - the length of the string
* *Collision resolution by chaining*:
  + each slot from the hash table contains a list, with the elements that hash to that slot
* *Operations:*
  + *insert(String s)* – insert a new element to the beginning of the list ht[hash(s)] => void
  + *search(int k)* – returns the list associated with key k | null => ArrayList[String]
  + *getId(String s)* – returns they key and the position the element is in the list ht[key] => [int, int]