

## HW3

- 1- One limitation with hash table is the fixed size of the array, modify the code of previous lab (hashing with linear probing) so in insertion operation if the table is full, its size should be duplicated.
- 2- In hash table, chaining approach, long linked list needs more time to be searched to find or delete an element. To enhance this structure, you need to add a new method called ***duplicate*** that receives an integer number represents the max. average number of nodes in each chain. Your method will calculate the average number of nodes currently in the table (total number of nodes divided by table size), if this average is greater than received parameter, your method should duplicate the table size, and rehash all elements according to the new table, otherwise, this method does nothing.