Task Ten.

Target:

- Implement hash tables.
- Solve this problems using Hash Tables.
- Search about Hash tables and study It good.

Resources:

- Google it!
- Session link: **link.**

Task:

First part :

1. Build a hash table from scratch. Use chaining strategy for handling collisions.
2. Build a hash table from scratch. Use linear probing strategy for handling collisions.

Implement the following operations:

- put(int, String)

- get(int)

- remove(int)

- size()

Hint :size() method is O(1) … make variable named count , increase it when added element and decrease it when remove element

Second part : solve this problems using hash tables only.

Problem 1:

➢ Receive an string and print the occurrence in each element on it.

Problem 2:

➢ Using hash tables write an algorithm that take a string and print first not repeated character.

Problem 3:

➢ Find the most repeated element in an array of integers. **What is the time complexity of this method?**

Example :

Input: [1, 2, 2, 3, 3, 3, 4]

Output: 3

Deadline:

29/02/2024 at 11:59 PM