Data Structures Lab
Lab 14:
Hashing Implementation 2

Question 1:

Write a C++ code to implement 'Chaining" in a Hash Table. You will need to create the following classes:

1. Class Node {
   int key
   Int value
   Node* next;
   }
   You will need to make the constructor of this class as well.

2. Class HashTable {
   int num of elements
   int capacity
   Node ** arr_of_linkedlist}
3. Int Hash_Function (int key) // You can use the modulus operator for the hash function
4. Void insert (int key , int value)
5. Void remove (int key)
6. ~HashTable()

Question 2:

Given a hash table having multiple entries and the size of the table is n, return the majority element.

The majority element is the element that appears the greatest number of times. You may assume that the majority element always exists in the hash table.

Example 1: **Input:** nums = [[3, 2], [3]]
Output: 3

Example 2: **Input**: nums = [[2, 2], [1, 1], [1, 2, 2]]
Output: 2