

**GIT Department of Computer Engineering**  
**CSE 222/505 - Spring 2020**  
**Homework 6 Question 4 Report**

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## 1. CLASS DIAGRAMS

Class diagram of Question 4 is added to Report\_q3 file as named 1801042092\_Class\_Diagram.png because image didn't fit to pdf file.

## 2. PROBLEM SOLUTION APPROACH

KWHashMap interface, HashTableOpen and HashTableChain classes are given at the book so I copied that interface as java file. Then at the problem a, we had to change linkedlist version of the HashTableChain class to BinaryTree version. I wrote my own Binary Tree class. With this implementation, I stack Nodes that has same key values at the same binary tree and I sort them as Binary search tree.

## 3. TEST CASES

Case	Scenario	Test Steps	Expected
Test put	Putting 1000 value to KWHashMap	Give put function keys and values from 1 to 1000	Map that has values from 1 to 1000
Test get	Getting values from 1 to 1000	Give get function keys from 1 to 1000 so it returns values of that map	Map that has values from 1 to 1000
Test remove	Remove values from 1 to 1000	Give remove function key values which are from 1 to 1000	Deleting all values

## 4. RUNNING AND RESULTS

Graph of that question is given as 1801042092\_graph.pdf and results of that question is given named 1801042092\_output.csv .