Question 1: *Is it more or less efficient to use a hashmap or linked list when trying to search for an element? Explain and give an example for each scenario.*

It is more efficient to use a hashmap than a linked list to search for an element. Using a linked list, all the items are stored sequentially, so you would have to search through the list one at a time. The time complexity would be O(n). A hashmap on the other hand uses an array which holds the values in a linked list. If the hash function is decent, then the number of values in each index (bucket) will be relatively the same. So, the time complexity would be around O(1), because you are able to jump straight to the index where the item is held and only have to search through a few elements at most.