Issues with using or implementing a Hash Table:

Client/User has to do the following:

1. implement the hashCode function on the key

Implementor of the Hash Table based Dictionary has to handle the following for a Library Data Structure:

- 1. implement compression function (hc --> index)
- 2. handle collisions (chaining or probing)
- 3. load factor .75, increase 1.5 times which changes load factor to .5 (table size prime #)

```
Algorithm sortRBG(L)
curr := L.first()
while !L.isLast(curr) /\ color(curr.element()) = Red do
     curr := L.after(curr)
nextRed := curr
while !L.isLast(curr) do
     curr := L.after(curr)
     if curr.element().color() = Red then
          L.swapElements(curr, nextRed)
          nextRed := L.after(nextRed)
curr := nextRed
while !L.isLast(curr) /\ color(curr.element()) = Blue do
     curr := L.after(curr)
nextBlue := curr
while !L.isLast(curr) do
     curr := L.after(curr)
     if curr.element().color() = Blue then
          L.swapElements(curr, nextBlue)
          nextBlue := L.after(nextBlue)
```