John Storch

304483390

Project 4

1.My hash table works for the base care but it doesn’t work in combination with everything else in the program. I ran out of time and although all else works, hash table has issues but again it will work for set get and discard in basic cases.

2. I expect the Big O for my hashtable to meet expected times but it still does not always work for some cases.

3. set()

check if full and return false if so

make a new node

if not a permanent node

put the node on the list at the end and fix the pointers

if the bucket is empty

put the node in

for the first node in a bucket,

check for duplicates

replace if so

swap pointers

delete the old node

else

add it at the end of the table

return true

touch()

for all the node in a list of them in order created

if the node is there

fix its place both in the linked list of its order

and in its hashtable

then delete it

return true

return false if no node found

discard()

if the linked list of nodes in order created is empty

return false

for the first node in the list

if its last isn’t null

set its lasts next pointer to be its current next pointer

if its next isn’t null

set its next’s last pointer to be its current last pointer

fix the line

set value and key to the nodes value and key

delete p

return true