**CSCI 323-33 Radix Sort (C++)**

Han Wen Loh

Due date: Oct. 30, 2018

Algorithm steps:

Step 0: inFIle 🡨 open the input file

outFile1 🡨 open out file 1

outFile2 🡨 open out file 2

Step 1: tableSize 🡨 10

hashTable[2][tableSize] 🡨 2 hash table

currentTable 🡨 0

previousTable 🡨 0

maxDigit 🡨 0

currentDigit 🡨 0

sortStep 🡨 0

stack 🡨 new LinkedListStack

Step 2: loadStack(inFile, stack, outFIle2)

Step 3: dumpStack(stack, currentDigit++, currentTable)

Step 4: if(currentTable == 0)

currentTable = 1

preciousTable = 0

else

currentTable = 0

previousTable = 1

Step 5: currentQ 🡨 0

Step 6: if hashTable[preciousTable][currentQ] is not empty

dumpQueue(hashTable[preciousTable][currentQ], currentDigit, currentTable)

Step 7: currentQ++

Step 8: repeat step 6-7 until currentQ == tableSize

Step 9: currentDigit++

Printable(hashTable[currenttable], outFile1)

Step 10: repeat Step 4-9 until currentDigit == MaxDigit

Step 11: close all files