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class WordNode:
    def __init__(self, word="",mean=""):
        self.word = word
        self.meaning = mean
        self.isLink = -1
class HashTable:
        __init__(self):
        self.dictionary = []
        self.maxSize = 17
        self.length = 0
        for i in range (self.maxSize):
            self.dictionary.append(WordNode("",""))
    def hashFunction(self, word):
        k=0
        for i in range (len(word)):
            k+=ord(word[i])
        k = int(k/(len(word)+1))
        k = k % self.maxSize
        return k%self.maxSize
    def searchForNode(self, key):
        index = self.hashFunction(key)
        while(self.dictionary[index].word != "" and count < self.length):</pre>
            if(self.dictionary[index].word != "" and count<=self.length):</pre>
                if(self.dictionary[index].word == key):
                    return True
                index = self.dictionary[index].isLink
                count +=1
        return False
    def insertWithoutReplacement(self, word, mean):
        if(self.searchForNode(word)==False and self.length<self.maxSize):</pre>
            index = self.hashFunction(word)
            if(self.dictionary[index].word == ""):
                self.dictionary[index].word = word
                self.dictionary[index].meaning = mean
                self.length +=1
            elif (index == self.hashFunction(self.dictionary[index].word)):
                while(self.dictionary[index].link != -1):
                    index = self.dictionary[index].isLink
                temp = index
                while(self.dictionary[temp].word != ""):
                    index +=1
                self.dictionary[index].key = word
                self.dictionary[index].meaning = mean
            else:
                while(self.dictionary[index] != ""):
                    index +=1
                self.dictionary[index].word = word
                self.dictionary[index].meaning = mean
        else:
            print("element alrleady exist")
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def insertWithReplacement(self, word, mean):
        if self.searchForNode(word) == False and self.length < self.maxSize:</pre>
            self.length += 1
            index = self.hashFunction(word)
            if self.dictionary[index].word == "":
                 self.dictionary[index].word = word
                 self.dictionary[index].meaning = mean
            elif self.hashFunction(self.dictionary[index].word) ==
self.hashFunction(word):
                 while self.dictionary[index].link != -1:
                     index = self.dictionary[index].link
                 x = index
                 while self.dictionary[x].word != "":
                     x += 1
                 self.dictionary[index].link = x
                 self.dictionary[x].word = word
                 self.dictionary[x].meaning = mean
            else:
                 kw = self.dictionary[index].word
                 mn = self.dictionary[index].meaning
                 self.dictionary[index].word = word
                 self.dictionary[index].meaning = mean
                 self.insertWithReplacement(kw, mn)
        el se
            print("HashTable Full")
    def printHashtable(self):
        for i in self.dictionary:
            print("word : ", i.word, " -> Meanning : ",i.meaning )
    def delete(self, key):
        if self.searchForNode(key) is True:
            count = 0
            index = self.hashFunction(key)
            while self.dictionary[index].word != key:
                 index = self.dictionary[index].isLink
            self.dictionary[index].word =
            self.dictionary[index].meaning =
            x = index-1
            while self.hashFunction(self.dictionary[x].word) !=
self.hashFunction(key) and count<self.length:</pre>
                x -=
                 count += 1
                 if x<0:
                     x = self.maxSize
            self.dictionary[index] = self.dictionary[x]
            self.dictionary[x].word = ""
            self.dictionary[x].meaning = ""
            self.dictionary[x].isLink = -1
a = HashTable()
while True:
    print("1. Insert WR")
print("2. Insert WOR")
print("3. print")
print("4. delete")
    print("5. close")
    ch = int(input("enter the choice : "))
    if(ch ==1):
        word = str(input("enter the word "))
        mean = str(input("enter the meaning "))
        a.insertWithoutReplacement(word, mean)
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elif(ch ==2):
         word = str(input("enter the word "))
         mean = str(input("enter the meaning "))
         a.insertWithReplacement(word, mean)
    elif (ch == 3):
         a.printHashtable()
    elif (ch ==4):
         word = str(input("enter the word "))
         a.delete(word)
    elif(ch == 5):
         break
1.1.1
Output
1. Insert WR
2. Insert WOR

    print
    delete

5. close
enter the choice : 1
enter the word ironman
enter the meaning tony stark
1. Insert WR
2. Insert WOR

    print
    delete

5. close
enter the choice : 1
enter the word spiderman
enter the meaning peter parker

    Insert WR
    Insert WOR

print
4. delete
5. close
enter the choice : 1
enter the word captian america
enter the meaning steve rogers
1. Insert WR
2. Insert WOR
print
4. delete
5. close
enter the choice : 1
enter the word hulk
enter the meaning bruce banner
1. Insert WR
2. Insert WOR
print
4. delete
5. close
enter the choice : 3
word : -> Meanning :
word : -> Meanning :
word :
word: -> Meanning:
word: hulk -> Meanning: bruce banner
word: -> Meanning:
word: -> Meanning:
word : -> Meanning :
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word : spiderman -> Meanning : peter parker
word : -> Meanning :
'''
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