#jacard - comparing words

import collections

def jaccard(a, b):

c = a.intersection(b)

print("this is intersection", c)

d=a.union(b)

print("this is union", d)

\_a = collections.Counter(a)

\_b = collections.Counter(b)

c = (\_a - \_b) + (\_b - \_a)

print("c", c)

n = sum(c.values())

print(\_a)

print(\_b)

print("\_a and \_b")

print ("n", n)

return float(len(c)) / (len(a) + len(b) - len(c))

list1 = ['dog', 'cat', 'rat', 'gerbil', 'rat', 'rat']

list2 = ['dog', 'cat', 'mouse', 'cow', 'horse', 'rat']

words1 = set(list1)

words2 = set(list2)

print("words1: ", words1)

print("words2: ", words2)

z = jaccard(words1, words2)

print("this is z", z\*100)