class Solution(object):

def isScramble(self, s1, s2):

"""

:type s1: str

:type s2: str

:rtype: bool

"""

if len(s1)!=len(s2):

return False

length = len(s1)

f = [[[False for i in range(length+1)] for i in range(length)] for i in range(length)]

for i in range(length):

for j in range(length):

if s1[i] == s2[j]:

f[i][j][1] = True

for k in range(2,length+1):

for i in range(length-k+1):

for j in range(length-k+1):

for w in range(1,k):

if f[i][j][w] and f[i+w][j+w][k-w]:

f[i][j][k] = True

break

for w in range(1,k):

if f[i][j+k-w][w] and f[i+w][j][k-w]:

f[i][j][k] = True

break

return f[0][0][-1]