class Solution(object):

def isInterleave(self, s1, s2, s3):

"""

:type s1: str

:type s2: str

:type s3: str

:rtype: bool

"""

len\_s1,len\_s2,len\_s3 = len(s1),len(s2),len(s3)

if len\_s1+len\_s2 != len\_s3:

return False

dp = [[False for \_ in range(len\_s2+1)] for \_ in range(len\_s1+1)]

dp[0][0] = True

for i in range(len\_s1+1):

for j in range(len\_s2+1):

if i==0 and j==0:

continue

if j<1:

dp[i][j] = dp[i-1][j] and (s3[i+j-1]==s1[i-1])

continue

if i<1:

dp[i][j] = dp[i][j-1] and (s3[i+j-1]==s2[j-1])

continue

dp[i][j] = (dp[i-1][j] and s3[i+j-1]==s1[i-1]) or (dp[i][j-1] and s3[i+j-1]==s2[j-1])

return dp[-1][-1]