

38) Check If a String Can Break Another String Given two strings: s1 and s2 with the same size, check if some permutation of string s1 can break some permutation of string s2 or vice-versa. In other words s2 can break s1 or vice-versa. A string x can break string y (both of size n) if  $x[i] \geq y[i]$  (in alphabetical order) for all i between 0 and n-1. Example 1: Input: s1 = "abc", s2 = "xya" Output: true Explanation: "ayx" is a permutation of s2="xya" which can break to string "abc" which is a permutation of s1="abc".

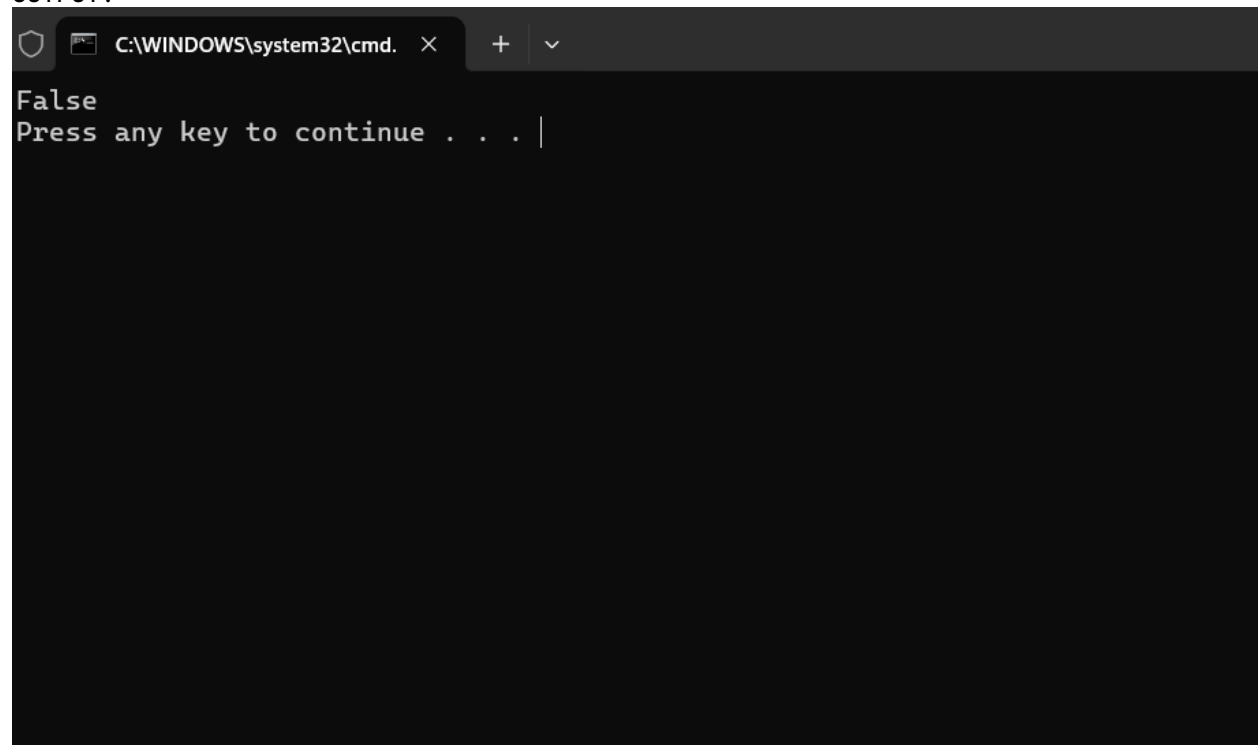
CODE:

```
def checkIfCanBreak(s1, s2):
    s1_sorted = sorted(s1)
    s2_sorted = sorted(s2)

    if all(s1_char >= s2_char for s1_char, s2_char in zip(s1_sorted, s2_sorted)) or
all(s2_char >= s1_char for s1_char, s2_char in zip(s1_sorted, s2_sorted)):
        return True
    else:
        return False
```

```
s1 = "abe"
s2 = "acd"
print(checkIfCanBreak(s1, s2))
```

OUTPUT:

A screenshot of a Windows command prompt window. The title bar shows the path 'C:\WINDOWS\system32\cmd.' with a close button. The window content is black with white text. It displays 'False' on the first line and 'Press any key to continue . . . |' on the second line, with a cursor at the end of the second line.

TIME COMPLEXITY :  $O(n \log n)$