

22. 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.

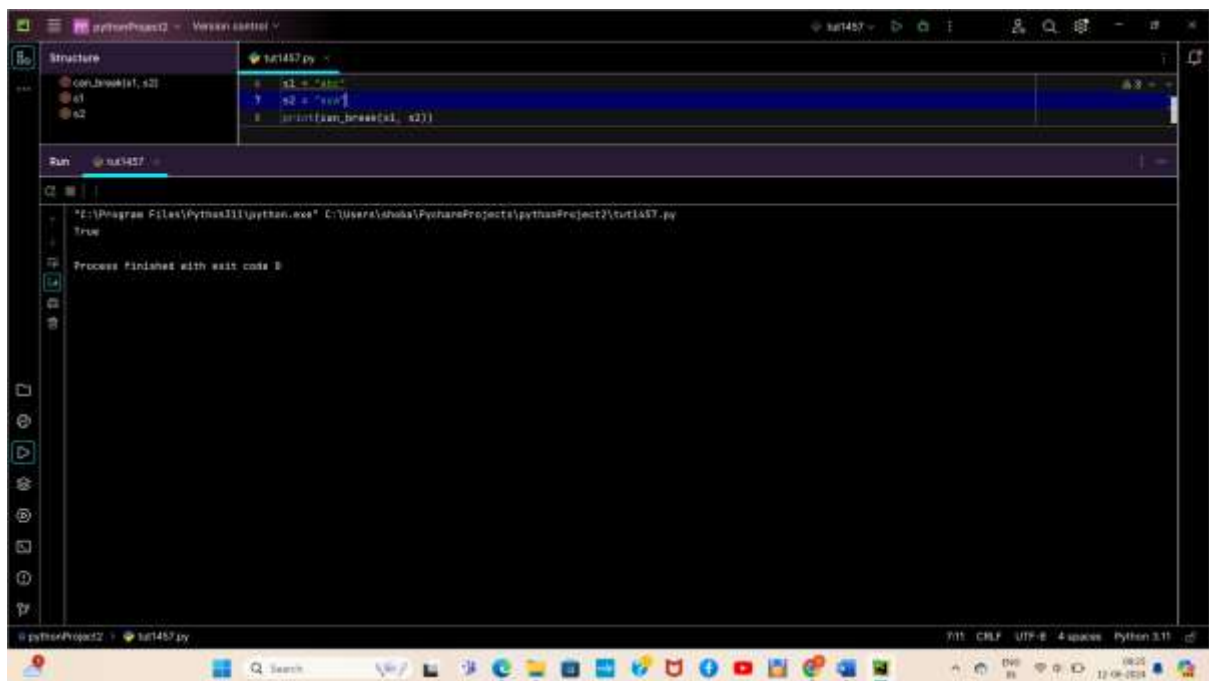
Program:

```
def can_break(s1, s2):  
    return all(ord(c1) >= ord(c2) for c1, c2 in zip(sorted(s1), sorted(s2))) or \  
           all(ord(c2) >= ord(c1) for c1, c2 in zip(sorted(s1), sorted(s2)))
```

Example usage:

```
s1 = "abc"  
s2 = "xya"  
print(can_break(s1, s2))
```

Output:

A screenshot of a Python IDE window titled 'pythonProject2'. The editor shows a file 'tut1457.py' with the following code:

```
s1 = "abc"  
s2 = "xya"  
print(can_break(s1, s2))
```

The 'Structure' pane on the left shows a tree view with 'can_break(s1, s2)', 's1', and 's2'. The 'Run' pane at the bottom shows the execution output: 'True'. The status bar at the bottom indicates '7/11', 'UTF-8', '4 spaces', and 'Python 3.11'. The Windows taskbar is visible at the very bottom.