CSc 2720 - Data Structures: Lab 3

How to Submit:

Please submit your answers in icollege once you have completed. Failure to submit will result in a zero for this lab.

Problem 1:

Write a function called `backspaceCompare` that takes two strings `s1` and `s2` and evaluate them when both are typed into empty text editors. (# means a backspace character). `backspaceCompare` should return true if the evaluated strings are equal or false if they are not equal. You should make use of the built-in java implementation of the stack data structure under `java.util.Stack`. (assume that the user inputs correct strings).

**Example 1:**

Input: `s1 = "DataStructuresIssss###Fun", s2 = "DataStructuresIszwp###Fun"
Output: true
Explanation: Both `s1` and `s2` become "DataStructuresIsFun".

**Example 2:**

Input: `S = "abc##", T = "wc#d#"
Output: false
Explanation: `s1` becomes “a” while `s2` becomes “w”

```
import java.util.Stack;
public class Lab3 {

    public static void main (String[] args){
        String s1 = "DataStructuresIssss###Fun";
        String s2 = "DataStructuresIszwp###Fun";
        boolean ans = backspaceCompare(s1,s2);
        System.out.println(ans); // Should be True
    }

    public static boolean backspaceCompare(String s1, String s2){
        Stack<Character> s1_stack = new Stack<Character>();
        Stack<Character> s2_stack = new Stack<Character>();

        // Example of push            stack.push("D")
        // Example of peek stack.peek()
        // Example of pop stack.pop()
        // Example of isEmpty stack.isEmpty()

        // INSERT YOUR CODE HERE
    }
}
```