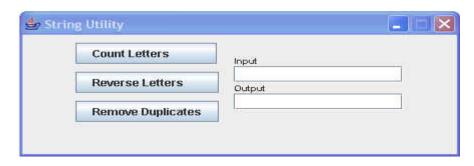
1. Write the Swing code to perform the following screen.



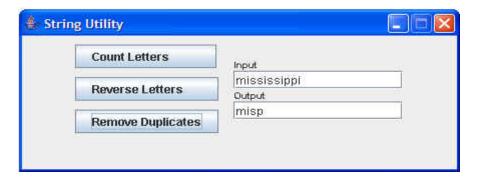
Create the necessary ActionListeners so that, when Count Letters is clicked, the number of characters in the Input field is placed in the Output field,



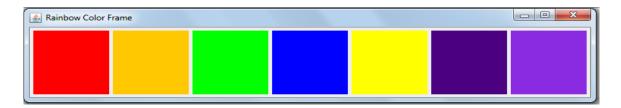
and, when Reverse Letters is clicked, the letters in the input area are reversed and placed in the output area,



and, when the Remove Duplicates is clicked, the duplicate letters are removed and the result is placed in the output area.



2. Create a Frame with seven buttons using FlowLayout. Set the Rainbow colors as a button background. Implement action Listener for each button to display the message which gives the meaning of that color appeared on the rainbow in a dialog box.



For example if the user clicks the Red color they receive message dialog as "Red signifies passion, vitality, enthusiasm and security"

