

Jacob Silva
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Ch 5 HW p1
Analysis

My algorithm utilizes two loops that run for $O(n)$ where n is the size of the string inputted as well as two loops that run through the alphabet of 26 letters. This results in an overall time complexity of $O(2n) + O(2(26))$. Which results in an overall time/space complexity of $O(2n+52)$.

This time complexity will not change in any case as every char in the string must be checked when sanitizing, and the whole alphabet must be iterated through to compare the frequencies.