

String Manipulation Project

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The purpose of this project is to give you some familiarity with Java loops and Strings.

To complete the project, you should only need to be familiar with the StringBuilder class. All other utilities are unnecessary. For the purposes of efficiency, avoid using APIs to clean up your code. In most cases, a direct solution will perform better.

# Problem Statement

For this project, you’ll be asked to implement your own StringManipulation class. The purpose of this class is to provide eight utility string methods. These methods are described below:

## isAlphabetical

The isAlphabetical method must perform as expected. It will accept an input string and determine if the string is in alphabetical order. Character case can be ignored. If the string contains characters other than letters, these characters may be ignored. The following contains a table of true and false cases:

|  |  |
| --- | --- |
| True Cases | False Cases |
| “abcd” | “dcba” |
| “ab-fg” | “abdc” |
| “ghi--- “ | “ ba” |
| “HLmnO” | “Zy17” |

## reverseString

The reverseString method must perform as expected. It will accept an input string and return a string in the reverse order of the input string. There are no rules beyond this behavior. Simply reverse the input string and return it. The following is a table of input strings and their expected outputs:

|  |  |
| --- | --- |
| Input String | Output String |
| “hello” | “olleh” |
| “Lebron James” | “semaJ norbeL” |
| “FiShY” | “YhSiF” |
| “A” | “A” |
| “” | “” |

## capitalizeVowels

## insertSpacesBetweenLetters

## convertToHex

## removeChar

## generateAllChars

## containsSubSequence