

StringAnalyze

For this project you will create a class named StringAnalyze. The class will contain the following static methods. Your methods must be named exactly as they are given here. They must also contain the same number and types of parameters as given here. No syntax we have yet to cover in zyBooks or in class is allowed (regardless of its presence in zyBooks).

1. commonLetters

This method accepts two String parameters. The method returns a string that contains the letters (regardless of case) common to both strings.

For instance, if **Apple** and **orange** are given as parameters, the method returns **ae**. When the strings do not contain any common letters **<none>** is returned.

2. swapHere

This method accepts one string and one integer as a parameter. The method moves the substring that begins at the location of the integer to the front of the string and returns that string.

For instance, if **computer** and **5** are passed as parameters, the method returns the string **utercomp** is returned.

If a negative value or zero is passed as a parameter, return the original string.

If a value that is larger than the length of the string is passed, return the original string.

3. letterSum

This method accepts a single string as a parameter and returns an integer that is the sum of alphabetical values of **ONLY LETTERS** in the string.

For instance, if **dog** is passed as a parameter, 26 is returned because $d = 4$, $o = 15$, $g = 7$. So $4 + 15 + 7 = 26$.

Your method should only consider alphabetical characters. If **dog!!** is passed as a parameter, your method should still return 26.

If the parameter contains not alphabetical characters, such as **!+@#\$,** the method should return 0.

4. isValidPassword

This method accepts a single string parameter. The method returns true if the string is a valid password. A valid password must meet the following criteria:

- it contains at least 8 characters
- it contains only letters and numbers
- it contains at least two numbers
- it contains at least two capital letters
- it contains at least two lowercase letters

If **pword1** is passed as a parameter, the method should return **false** because the string is too short.

If **pword123** is passed as a parameter, the method should return **false** because the string does not contain any capital letters.

If **PWord123!** is passed as a parameter, the method should return **false** because the string contains a non-alphanumeric character.

If **passWORD** is passed as a parameter, the method should return **false** because the string does not have any numbers.

If **work1NGpassw0rd** is passed as a parameter, the method should return **true** because the string passes all criteria.