**String Exercises**

**Exercise 1:** Write a Java program that reads a line of integers and then displays each integer and the sum of all integers. (Use String Tokenizer class)?

**Exercise 2:** Create a class containing a method to create the mirror image of a String. The method should return the two Strings separated with a pipe(|) symbol .

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| Method Name | getImage |
| Method Description | Generate the mirror image of a String and add it to the existing string. |
| Argument | String |
| Return Type | String |
| Logic | Accepts One String  Find the mirror image of the String  Add the two Strings together separated by a pipe(|) symbol.  For Example  Input : EARTH  Output : EARTH|HTRAE  Hint: Use StringBuffer API (Ex: For this problem reverse method in Stringbuffer can be used)  Note: Learn the other APIs in StringBuffer |

**Exercise 3:** Create a method which accepts a String and replaces all the consonants in the String with the next alphabet.

**Note**: Consonant refers to all alphabets excluding vowels

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| Method Name | alterString |
| Method Description | Replace consonants |
| Argument | String |
| Return Type | String |
| Logic | Return the String replacing all the consonants with the next character.  For Example :JAVA should be changed as KAWA |

**Exercise 4:** Create a method that accepts a number and modifies it such that the each of the digit in the newly formed number is equal to the difference between two consecutive digits in the original number. The digit in the units place can be left as it is.

Note: Take the absolute value of the difference. Ex: 6-8 = 2

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| Method Name | modifyNumber |
| Method Description | Accepts a number and modify it as per the requirement |
| Argument | int number1 |
| Return Type | int |
| Logic | Accept a number and modify it such that the each of the digit in the newly formed number is equal to the difference between two consecutive digits in the original number.  For example.  Input: 45862  Output:13242  **Algorithm:**   Convert number into String   Extract each char using charAt method   Convert char to int and find the difference   Create new StringBuffer object and keep adding the difference   Finally convert StringBuffer to int |

**Exercise 5**: Write a Java program that displays the number of characters, lines and words in a text?

**Exercise 8:** Create a method that accepts a String and checks if it is a positive string. A string is considered a positive string, if on moving from left to right each character in the String comes after the previous characters in the Alphabetical order. For Example: ANT is a positive String (Since T comes after N and N comes after A). The method should return true if the entered string is positive.