

CIS*2430 Lab Assignment 1

“Don’t String me along”

For this lab assignment you will be dealing with the java string class. You will write a program that will read in a line of user input, store it as a string and apply various operations to it. The program will begin by entering a control loop with the following options:

1. **Input String**
2. **Print String**
3. **Reverse the String**
4. **Tokenize String**
5. **Count spaces in the string**
6. **Check for a number in the string**
7. **Count Vowels**
8. **Count Consonants**
9. **Exit Program**

The user will be able to select any of the options by entering the associated number. If an invalid entry occurs, the user should be informed of that they have entered an invalid option, and allow the user to select a valid option. The program should not exit on invalid entry. The functionality of each option is as follows

1. **Input String** – reads in a line of input from the user and stores it.
2. **Print String** – prints the string as currently stored.
3. **Reverse the String** – Reverse, store, and print the string.
4. **Tokenize String** – Tokenize the string, delimited by a blank space.
5. **Count spaces in the string** – print a count the number of blank spaces in the string. Note: \t and \n characters count as a single space.
6. **Check for a number in the string** – Print true, if there exists any numbers in the string, and false if there is no numbers present.
7. **Count Vowels** – Print the total number of A,E,I,O, and U’s present in the string. This operation should not be case sensitive.
8. **Count Consonants** – Print the number of letters that are not A,E,I,O, and U’s. This operation should not be case sensitive
9. **Exit Program** – Exit the program.

Note: That if no string has been inputted before the users selection options 2-8 please prompt the user that the operation can not occur because no string has yet to be inputted.

Once completed demo code for the TA.