Session 3 & 4 Self Practice Assignments

1. **Write a program that accepts a sentence and calculate the number of letters and digits.**
   Suppose the following input is supplied to the program:
   hello world! 123
   Then, the output should be:
   LETTERS 10
   DIGITS 3
2. **Write a Python program to add 'ing' at the end of a given string (length should be at least 3). If the given string already ends with 'ing' then add 'ly' instead. If the string length of the given string is less than 3, leave it unchanged. Go to the editor**
   Sample String : 'abc'
   Expected Result : 'abcing'
   Sample String : 'string'
   Expected Result : 'stringly'
3. **Write a Python function that takes a list of words and returns the length of the longest one.**
4. **Given a string containing uppercase characters (A-Z), compress the string using Run Length encoding. Repetition of character has to be replaced by storing the length of that run.**

   Write a python function which performs the run length encoding for a given String and returns the run length encoded String. Provide different String values and test your Program.

Sample Input	Expected Output
AAAABBBBCCCCCCCC	4A4B8C
AABCCA	2A1B2C1A

5. **Write a program to count and display the number of capital letters in a given string.**
   .
6. **Write a program to check if the given string is Palindrome or not?**
   .
7. **Write a program to count the number of each vowel in a string**

8. **Write a program to remove all punctuation from the string provided by the user punctuations = '"!()-[]{};:'"\,<>./?@#$%^&*_~'"‘**
9. **Write a Python program to accept a string and display the resultant string in reverse order .**
   The resultant string should contain a ll characters at the even position of accepted string ignoring blank spaces.
   Accepted string: Anappleadaykeepsthedoctoraway
   Resultant string: Aapedyepteotrwy
   Expected_output: ywrtoetpeydepaA
10. **Given a string containing both upper and lower case letters. Write a Python program to count the number of repeated characters and display the maximum count of a character along with the character.**
    Sample Input: ABaBCbGc
    Output:
    2A
    3B (three times B is repeated)
    2C
    1G