Lab Cycle 2

1. Create a string from the given string where the first and last character are exchanged.

   Eg: Python ⇒ nythoP

2. Get a string from an input string where all occurrences of the first character are replaced with '$', except the first character. [eg: onion -> oni$n]
3. Create a single string separated with space from two strings by swapping the character at position 1.

   Eg : str1 = "Hello" str2 ="World" , then create a string str3 = "Hollo Werld" [Hint: use slicing and concatenation]
4. Count the number of characters (character frequency) in a string.
5. Add 'ing' at the end of a given string. If it already ends with 'ing', then add 'ly'
6. Store a list of first names. Count the occurrences of 'a' within the list.
7. Write a python program to read two lists color-list1 and color-list2. Print out all colors from color-list1 not contained in color-list2.
8. Create a list of colors from comma-separated color names entered by the user. Display first and last colors.
9. Write a program to prompt the user for a list of integers. For all values greater than 100,store 'over' instead.
10. From a list of integers, create a list after removing even numbers.
11. Accept a list of words and return the length of the longest word.
12. Write a program to prompt the user to enter two lists of integers and check

    (a) Whether lists are of the same length.

    (b) Whether the list sums to the same value.

    (c) Whether any value occurs in both Lists.
13. Write a Python program to count the occurrences of each word in a line of text.

    Hint: use split() function and dictionary

    Sample input : the quick brown fox jumps over the lazy dog

    Output : {'the': 2, 'jumps': 1, 'brown': 1, 'lazy': 1, 'fox': 1, 'over': 1, 'quick': 1, 'dog.': 1}
14. List comprehensions:

    (a) Generate positive list of numbers from a given list of integers

    (b) Square of N numbers

(c) Form a list of vowels selected from a given word

(d) Form a list ordinal value of each element of a word (Hint: use ord() to get ordinal values)

15. Sort dictionary in ascending and descending order.
16. Merge two dictionaries.