Practice Sheet - string:

Q1. Write a Python program to check if a given string is a valid email address.

Ex: [example@domain.com](mailto:example@domain.com)

Hint: Check ‘@’ comes earlier than ‘dot’

Q2. Write a Python program to reverse the order of words in a given string without reversing the individual words.

Input: "Hello World from Python"

Output: "Python from World Hello"

Q3. Write a Python program that takes a string and a character as input and returns a list of indices where the character occurs in the string.

Input: "programming", 'm'

Output: [6, 7]

Q4. Write a Python program to remove all occurrences of a given substring from a string.

Input: "This is a test string for testing", "test"

Output: "This is a string for ing"

Q5. Write a Python program to find all unique characters in a given string.

Input: "programming"

Output: ['p', 'o', 'r', 'g', 'a', 'm', 'i', 'n']

Q6. Write a Python program to count the number of words in a given string that start with a specific letter which was taken as a input.

Input: "This is a test string for testing", 't'

Output: 3

Q7. Write a Python program to split a string into a list of words and then join them back into a single string with a hyphen - as a separator.

Input: "Python is awesome"

Output: "Python-is-awesome"

Q8. Write a Python program to capitalize the first and last character of every word in a given string.

Input: "hello world from python"

Output: "HellO WorlD FroM PythoN"

Q9. Write a Python program to remove given special characters from a given string.

Special characters include symbols like @, #, !.

Input: "Hello@World!123"

Output: "HelloWorld123"

Note:

Q1. Write a program to check if the word ‘am’ is present within a given string, and if so, return the index of its first occurrence.

String = “Hello World, I am Programmer”

Output: 15

Q2. Write a python program which takes string as input and replace every occurrence of input string in the given the list to ‘hii’ and also print list which have length of all the strings inside that list.

Sample Input:

Input\_string : ‘am’

List = [‘I’ , ‘am’ , ‘programmer’ , ‘and’ , ‘I’ , ‘am’ , ‘coder’]

Output:

[‘I’ , ‘hii’ , ‘programmer’ , ‘and’ , ‘I’ , ‘hii’ , ‘coder’]

[1, 3, 10, 3, 1, 3, 5]

Q3. Write a program to take two strings and an integer. The program should slice the first string till the given integer and concatenate the resulting substrings with the second string.

Q4. Write a python program which convert all occurrences of first character and last character of given string into ‘$’.

Sample Input: ‘concatenation’

Output: $o$$ate$atio$

Q5. Write a program to remove all vowels from a given string.

Sample Input: ” concatenate”

Output: cnctnt

Q6. Write a python program which takes character as a input and count the occurrences of that character into the given string and convert all them into ‘#’.

String = ‘programming’

Sample Input: g

Output: 2

‘pro#rammin#’

Q7. Write a python program which takes string as an input and removes the character at even indices.

Sample Input: ‘python’

Output: pto

Q8. Write a program that splits a given string into words, sorts the words in alphabetical order, and joins them back into a single string.

String = ‘hello, i am a machine learning engineer’

Output = a am engineer hello, i learning machine

Q9. Write a python program which takes string as input and swap first and last character of that string.

Sample Input: ‘hello’

Output: ‘oellh’

Q10. Write a program to check if a given string is a palindrome.

Palindrome: The string is palindrome if the sequence of characters is in same order from backward as well as forward reading.

Example: wow, rotator, pop, noon.

Q11. Write a python program which convert given list into a single string where each name is capitalized and separated by a semicolon.

list = ['bhopal' , 'vidisha' , 'rewa' , 'bina']

Q1. Write a Python program to find the length of the last word in a sentence and also find at what index that last word is present.

Str = “This is a python programming course.”

Q2. Write a Python program to check if two strings are anagrams (all the characters of str1 should be present in str2 and vice versa).

Examples of anagram strings are:

1. reed / deer.

2. flow / wolf.

Q3. Write a python program which count the total number of vowels in the given string and make the list of that vowels.

Str = “Hello, World how are you”

Output: 8

[‘e’, ‘o’ , ‘o’ , ‘o’ , ‘a’ , ‘e’ , ‘o’ , ‘u’]

Q4. Write a program to input a string and print each individual word of it along with its length.

Str = “what is the name”

Output: 4, 2, 3, 4

Q5. Write a python program which reverse the individual word of the given string and prints it.

Str = “This is a string”

Output: “sihT si a gnirts”