Python Assesment:

1)From the given list of string remove string which is substring of other

Example : input = [‘work’,’office’,’work from home’]

Output = [’office’,’work from home’]

2)find all possible palindromes from the given string and give the no of substrings need to be removed to get that palindrome

Example : Input : ‘acscyini’

Output : csc : 2,ini : 1

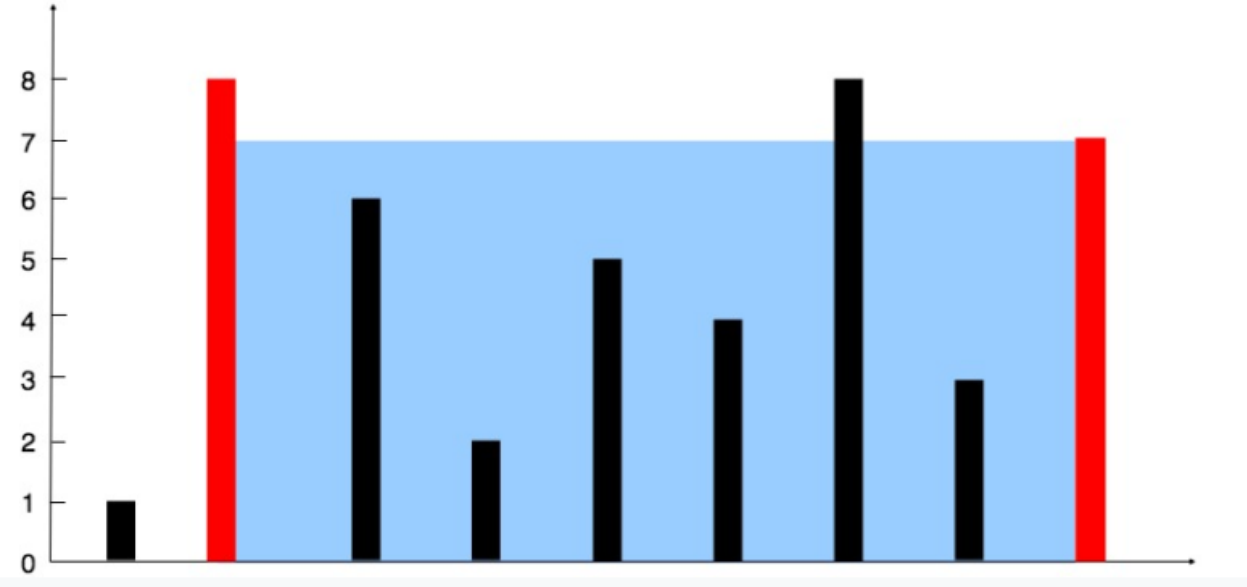
Explanation : To get ‘csc’ from the given string we need to remove ‘a’ and ‘yini’ so csc : 2

To get ‘ini’ from the given string we need to remove ’acscy’ so ini : 1

3) You are given an integer array height of length n. There are n vertical lines drawn such that the two endpoints of the ith line are (i, 0) and (i, height[i]).Find two lines that together with the x-axis form a container, such that the container contains the most water. Return the maximum amount of water a container can store.

Examlpe :

Input: [1,8,6,2,5,4,8,3,7]



Output: 49

Explanation: The above vertical lines are represented by array [1,8,6,2,5,4,8,3,7]. In this case, the max area of water (blue section) the container can contain is 49.

4) Write a program to display only those numbers from a list that satisfy the following conditions

- The number must be divisible by five
- If the number is greater than 150, then skip it and move to the next number
- If the number is greater than 500, then stop the loop

5) Given an integer array. find a contiguous non-empty subarray within the array that has the largest product, and return *the product*.

Input : [2,3,-2,4]

Output : 6

explanation : [2,3] has largest product 6

6)Write a program to find the sum of series: 1 + 1/2 + 1/3 + ….. + 1/N.

7) convert binary number to decimal and hexadecimal

8)Write a generator function to return sequence of Fibonacci series.

9)Find the list of anagrams from the given paragraph

10) Get the difference between max and min number can be formed from input number

ex: input 126345

output 530865

explanation => 654321-123456

11) find whether parentheses in string is balanced or not

ex : "((a)(kd.))" --> True

"(())" --> False

12) get unique and common numbers from 2 input list

ex: first input -> 1 5 6 8 7 3

second input -> 8 6 7 9 2

output - > common -> [6,8,7]

unique -> [1,5,3,9,2]

13) form the largest number from the given list of non negative numbers

ex: [3,8,5,9,98,101] -> 998853101

101 and 98 from the list are not separated

14) Get first non-repeating character from given string

ex: abcdcd --> a

abacd ----> b

15) form the below pattern based on the input number(no of iteration should not exceed 1):

input ->6

output ->

1

2 2

3 3 3

4 4 4 4

5 5 5 5 5

6 6 6 6 6 6