CE259-PIP Programming Assignment

Due Date: 15ᵗʰ April, 2022

Assignment

Sr No	Title
1	You are given a string. Your task is to count the frequency of letters of the string and print the letters in descending order of frequency. If the following string is given as input to the program: **aabbbccde** Then, the output of the program should be: b 3 a 2 c 2 d 1 e 1
2	Write a procedure to find min, max, mean, standard deviation, variance of number list. Example Input : 10 50 80 70 49 23 11 4 output : 4 80 37.13 27.25 848.70
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. Notice that you may not slant the container. Input: height = [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. Example 2: Input: height = [1, 1] Output: 1
4	Given a list of integers, write a program to print the count of all possible unique combinations of numbers whose sum is equal to K. Input The first line of input will contain space-separated integers. The second line of input will contain an integer, denoting K Output The output should be containing the count of all unique combinations of numbers whose sum is equal to K Sample Input 1 2 4 6 1 3 6 Sample Output 1 3

5	Explain about the different types of Exceptions in Python with suitable example.
6	Complete django tutorial (part 1 to part 7) from the official document. **https://docs.djangoproject.com/en/4.0/**
7	Write a django code to send an e mail with attachment.
8	Program to demonstrate the Overriding of the Base Class method in the Derived Class.
9	Write Pythonic code to create a function named move_rectangle() that takes an object of Rectangle class and two numbers named dx and dy. It should change the location of the Rectangle by adding dx to the x coordinate of corner and adding dy to the y coordinate of corner.