Question -1.1

First\_name = ( input("Your First Name : "))

last\_name = (input("Your Last Name : "))

Full\_Name = print(First\_name + last\_name)

Used concatenation

A close up of a name

Description automatically generated

Question – 1.2

def string\_alternative(Str):

    output = ""

    for a in range(len(Str)):

        if a % 2 == 0:

            output += Str[a]

    return output

print(string\_alternative("Good evening"))

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Description automatically generated

Used string alternative and for loop to get the alternative letters.

Question 2:

file1 = open('input.txt', 'r')

counts = dict()

data = file1.read()

words = data.split()

for word in words:

    if word in counts:

        counts[word] += 1

    else:

        counts[word] = 1

print(counts)

f = open('output.txt', 'w')

f.write(data)

f.write('\nword\_count:\n')

for key, value in counts.items():

    f.write(f"{key}: {value}\n")

f.close()

open() -> opens the file, r ->read mode

file1.read() will read the entire content of the file

data.split() splits the data using space as a delimiter

The for loop iterates through each word in the words list. For each word, it checks if that word is already a key in the counts dictionary. If the word is already a key, it increments the value associated with that key . If the word is not a key, it adds the word as a key in the counts dictionary with an initial count of 1.

w-> write mode

write(data) ->writes the data

This second for loop iterates through the items (key-value pairs) in the counts dictionary. It writes each key (a word) followed by a colon and the associated value (the count) to the 'output.txt' file. Each pair is written on a new line.

A close up of a text

Description automatically generated

A screenshot of a computer program

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Question 3.1

L1=list(map(float,input().split()))

L2=[]

for x in L1:

    x=x\*2.54

    L2.append(x)

print(L2)

L1 = list(map(float, input().split()))

this line will take the input from the user mostly in space seperated list of numerical values using input(), and split() is used to split that line into sub strings. then the map() function is used to apply float() on all of those strings to float numbers. The entire these function will be emclosed in a list L1.

Then i have used the for loop to write the logic and the result is appended to list L2

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Description automatically generated

Question 3.2

L1=list(map(float,input().split()))

L2=[x\*2.54 for x in L1]

print(L2)

Here in L2 list we write the logic in the list and then print it.

A close-up of numbers

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