Summer 2024: CS5720: Neural Network Deep Learning: In Class Programming Assignment-2

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Github link: https://github.com/VasishtaYakkala/Neural-Network-and-Deep-Learning-icp2

1. Write a program that takes two strings from the user: first_name, last_name. Pass these variables to fullname function that should return the (full name).

o For example:

▪ First_name = “your first name”, last_name = “your last name”

▪ Full_name = “your full name”

o Write function named “string_alternative” that returns every other char in the full_name string.

Str = “Good evening”

Output: Go vnn

Note: You need to create a function named “string_alternative” for this program and call it from main function.

Solution:

Code:

```
First_name = ( input("Your First Name : "))
last_name = (input("Your Last Name : "))
Full_Name = print(First_name + last_name)
```

Output:

```
Your First Name : vasishta
Your Last Name : yakkala
Vasishtayakkala
```

Code:

```
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"))
```

Output:

```
Go vnn
```

2. Write a python program to find the wordcount in a file (input.txt) for each line and then print the output.

o Finally store the output in output.txt file.

Example:

Input: a file includes two lines:

Python Course

Deep Learning Course

Output:

Python Course

Deep Learning Course

Word_Count:

Python: 1

Course: 2

Deep: 1

Learning: 1

Solution:

Code:

```
try:
    file1 = open('input1.txt', 'r')
except FileNotFoundError:
    with open('input1.txt', 'w') as f:
        f.write("Python Course Deep Learning Course")
    file1 = open('input1.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)
```
Output:

```
{'Python': 1, 'Course': 2, 'Deep': 1, 'Learning': 1}
```

3. Write a program, which reads heights (inches.) of customers into a list and convert these heights to centimeters in a separate list using:

1) Nested Interactive loop.

2) List comprehensions

Example: L1: [150,155, 145, 148]

Output: [68.03, 70.3, 65.77, 67.13]

Soution:

Code:

```
L1=list(map(float,input().split()))
L2=[]
for x in L1:
   x=x*2.54
   L2.append(x)
print(L2)
```
Output:

```
150 155 145 148
[381.0, 393.7, 368.3, 375.92]
```

Code:

```
L1=list(map(float,input().split()))
L2=[x*2.54 for x in L1]
print(L2)
```
Output:

```
150 155 145 148
[381.0, 393.7, 368.3, 375.92]
```