Spring 2024: CS5720 Neural Networks & Deep Learning - ICP-2
Assignment-2
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Github Link: https://github.com/VinayGunuguntla/icp2.git
Video Link: https://drive.google.com/file/d/1FV0AiwA2fhWOltAmRxoN7V9GLMaO_tKO/view?usp=sharing

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).

Code:

```
# 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)

def Full_name(first_name="first name",last_name='last name'):# Here i have created Full name method by passing arguments first name and last name
    return first_name+' '+last_name # Here i have conacatinted both first name and last name which i have returned it as a string to the function
first_name=input("Enter your first name:/n")# Used input function to accept a string from the user and stored in a variable
last_name=input("Enter your last name:/n")
full_name=Full_name(first_name,last_name)#passed variables to the function
print(full_name)
```

Output:

```
Enter your first name:/nVinay Kumar Reddy
Enter your last name:/nGunuguntla
Vinay Kumar Reddy Gunuguntla
```

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

Code:

```
def string_alternative(string):
    o=''
    for i in range(0,len(string)):#Here i am iterating the string from 0 to the lenght of the string
        if(i%2==0):#Here i am taking each character and doing modulus with and equating to 0 so that we can get the all the alternate characters in the string
            o=o+string[i]# Here i am adding empty string to the list of characters according the index so that we can return the string and then print it.
    return o
string_alternative('Good evening')#called the function by passing "Good Evening" as a string.
```

Output:

```
'Go vnn'
```

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

Code:

```
with open('/content/sample_data/input_file.txt','r') as ipf:#created a file named input_file and used read and split functions to read the file and split the words into several words
    line=ipf.read()
    word=line.split()
    with open('output_file.txt','w') as opf:
        for i in word: # Here i have iterated through word variable where the split of words are returned
            opf.write(i+':'+str(word.count(i))+'\n')
opf=open('output_file.txt','r')
print(opf.read())
```

Output:

```
Python:1
Course:2
Deep:1
Learning:1
Course:2
```

0. 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

Code:

```
#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
heights=[]# Empty List
while True:
    x=float(input())
    if(x<=0):
        break
    heights.append(x)#this is in inches
    output=[x*2.54 for x in heights]
print(output)#this is in cm
```

Output:

```
6
4
3
2
0
[15.24, 10.16, 7.62, 5.08]
```