Spring 2023: CS5520

Neural Networks and Deep Learning - ICP-2

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

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

```
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```

Question 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).

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

In [2]:
```
#taking first name and last name inputs from the user
First_Name= input("Enter firstName: ");
Last_Name= input ("Enter lastName: ");
#concatenating the String
Full_Name=First_Name +" "+Last_Name
#printing the fullname as a result
print("Your full name is:", Full_Name);
#defing a method string_alternative
def string_alternative(var1):
    return var1[::2]
#this methos will return the every other character in the string
string_alternative(Full_Name)
```

```
Murthy
Kolla
Murthy Kolla
```

Out[2]:
```
'Mrh ol'
```

2. 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.

Question 2

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.

In [8]:
```
#using tyingextention
from typing_extensions import Text
import re
word_count = {}
#reading test from the input file
Text = open('input.txt', 'r')
string_text = Text.read().lower()
pattern = re.findall(r'[a-z]{2,15}', string_text)
for word in pattern:
    count_words = word_count.get(word,0)
    word_count[word] = count_words + 1
count_list = word_count.keys()
#iterating the word count
for words in count_list:
    print(words, word_count[words])
```

```
python 1
course 2
deep 1
learning 1
```

3. Write a program, which reads heights (inches.) customers into a list and convert these heights to centimeters in a separate list using:
1) Nested Interactive loop.
2) List comprehensions

In [6]:
```
#user input for height
print("Enter the height in inches and seperate by commas:")
height_list = input()
print("Nested interactive loop")
height_list1 = height_list[:]
cm_list1 = []
#spliting the input
for height1 in height_list1.split(','):
    height1 = float("{:.2f}".format(float(height1) * 0.39))
    cm_list1.append(height1)
print(cm_list1)
#comprehensions method
print("List comprehensions")
heightinch_list2 = height_list[:]
cm_list2 = [float("{:.2f}".format(float(height2) * 0.39)) for height2 in heightinch_list2.split(',')]
print(cm_list2)
```

```
Enter the height in inches and seperate by commas:
 150,155, 145, 148
Nested interactive loop
[58.5, 60.45, 56.55, 57.72]
List comprehensions
[58.5, 60.45, 56.55, 57.72]
```

GitHub link: https://github.com/murthykolla/Assignment-2

Video link: https://drive.google.com/drive/u/1/my-drive