Spring 2024: CS5720
Neural Networks and Deep Learning - ICP-2

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Video Link: https://drive.google.com/file/d/14FKsuliqUSz_a21s0skMIGYGdU482Uqc/view?usp=drive_link

Github Link: https://github.com/BalaRishik001/Neural-Networks-and-Deep-Learning-Assignments

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 = "**G**o**o**d e**ve**ni**n**g"
      Output: Go vnn

```
[3] def Full_name(first_name="first name",last_name='last name'):# Here i have created Full name method by passing
        return first_name+' '+last_name # Here i have conacatinted both first name and last name which i have retur

    first_name=input("Enter your first name:/n")# Used input function to accept a string from the user and stored :
    last_name=input("Enter your last name:/n")
    full_name=Full_name(first_name,last_name)#passed variables to the function
    print(full_name)

    Enter your first name:/nBala Rishik
    Enter your last name:/nMarneni
    Bala Rishik Marneni
```

Write function named "string_alternative" that returns every other char in the full_name string. Str = "Good evening" Output: Go vnn

```
[18] 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 th
                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
        return o
    string_alternative('Good evening')#called the function by passing "Good Evening" as a string.

    '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.

```python
with open('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 se
    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())
```

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

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

```python
def inches_to_cm(height_in_inches):
    return height_in_inches * 2.54
num_customers = int(input("Enter the number of customers: "))
heights_in_inches = [float(height) for height in input("Enter heights in inches (comma-separated): ").split(',')]

heights_in_centimeters = []
for height in heights_in_inches:
    height_cm = inches_to_cm(height)
    heights_in_centimeters.append(height_cm)
print("Heights in centimeters:", heights_in_centimeters)
```

```
Enter the number of customers: 4
Enter heights in inches (comma-separated): 150,155,145,148
Heights in centimeters: [381.0, 393.7, 368.3, 375.92]
```

Thank You