

ASSIGNMENT – 2

DEEP LEARNING NEURAL NETWORKS

Video Link: [Assignment2 video file](#)

Github link: [GitHub - nagaphaneendra2001/Deep_Learning_Neural_Networks](#)

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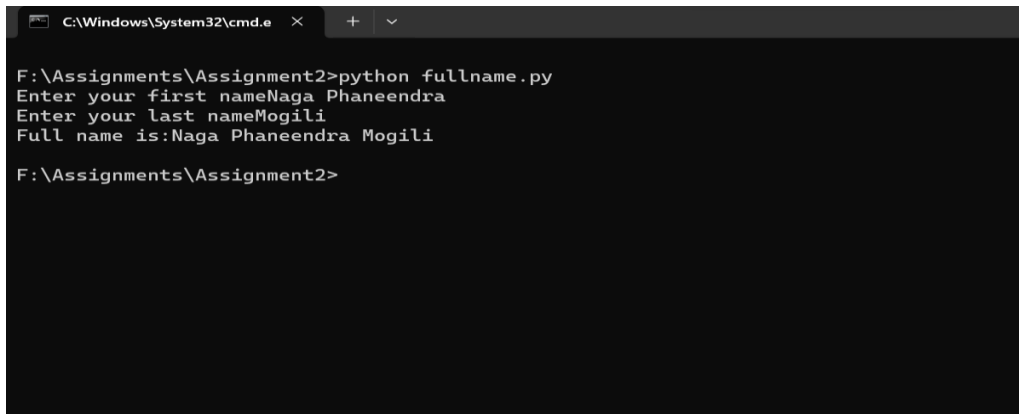
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1. Write a program that takes two strings from the user: first_name, last_name. Pass these variables to fullname function that should return the (full name). o For example: ▪ First_name = “your first name”, last_name = “your last name” ▪ Full_name = “your full name”

Source Code:

```
def FullName(first_name,last_name):  
    return "Full name is:"+first_name+" "+last_name  
  
if __name__ == "__main__":  
    first_name = input("Enter your first name")  
    last_name = input("Enter your last name")  
    print(FullName(first_name,last_name))
```

Output:



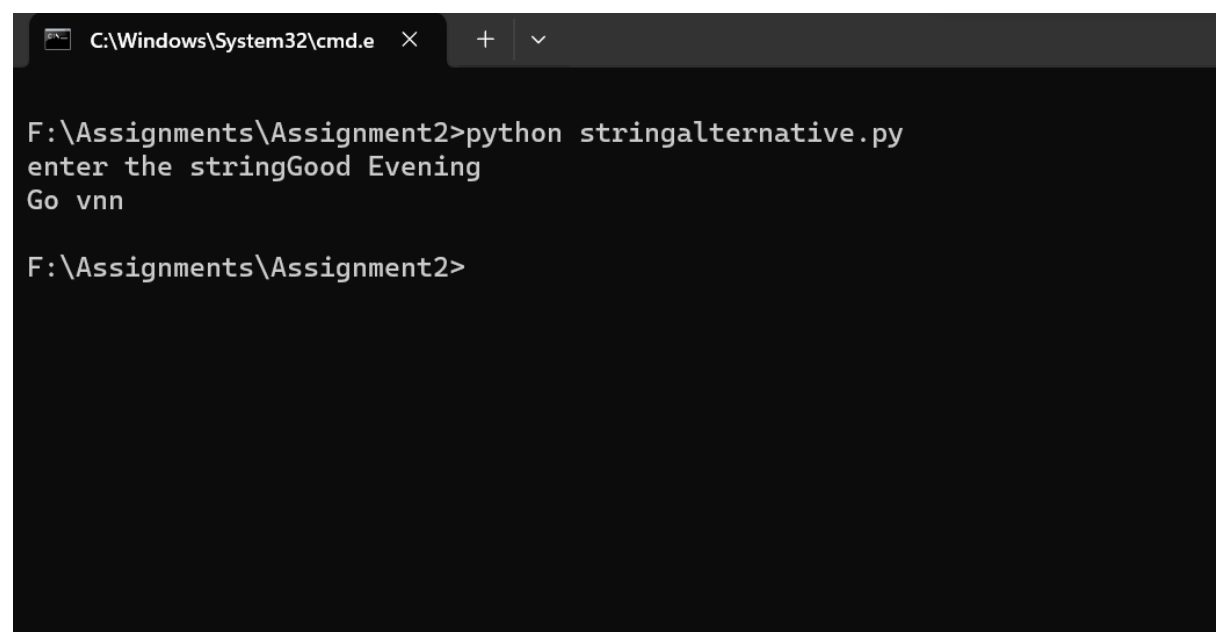
```
C:\Windows\System32\cmd.e  
F:\Assignments\Assignment2>python fullname.py  
Enter your first nameNaga Phaneendra  
Enter your last nameMogili  
Full name is:Naga Phaneendra Mogili  
F:\Assignments\Assignment2>
```

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

Source Code:

```
def string_alternative():  
    input_string = input("enter the string")  
    print(input_string[::2])  
  
if __name__ == "__main__":  
    string_alternative()
```

Output:



The screenshot shows a Windows command prompt window with the title bar "C:\Windows\System32\cmd.e". The command prompt is at the directory "F:\Assignments\Assignment2". The user has entered the command "python stringalternative.py". The program prompts "enter the string" and the user has entered "Good Evening". The program outputs "Go vnn".

```
C:\Windows\System32\cmd.e  
F:\Assignments\Assignment2>python stringalternative.py  
enter the stringGood Evening  
Go vnn  
F:\Assignments\Assignment2>
```

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

Source Code:

```
def count_word():  
    file1 = open("input.txt", "r")  
    info = file1.read().split("\n") # Using split to get a list of words  
    file2 = open("output.txt", "w")  
    for sentence in info:  
        sentence = sentence + "\n" + "\n"  
        file2.write(sentence)  
    #print(info)  
    file1.close()  
    file2.write("Word_Count: \n")  
    word_count = {}  
    for line in info:  
        words = line.strip().split(" ")  
        #print(x)  
        for word in words:  
            word_count[word] = word_count.get(word, 0) + 1  
    print("word_count:")  
    print(word_count)  
    for word, count in word_count.items():  
        entry = "\n" + word + " " + str(count)  
        file2.write(entry)  
  
    file2.close()  
  
count_word()
```

Output:

An output.txt is formed and output is written in that file as shown below:

```
output.txt
1  python course
2
3  Deep learning course
4
5  Word_Count:
6
7  python 1
8  course 2
9  Deep 1
10 learning 1

C:\Windows\System32\cmd.e X + v

F:\Assignments\Assignment2>python WordCount.py
word_count:
{'Python': 1, 'Course': 2, 'Deep': 1, 'Learning': 1}

F:\Assignments\Assignment2>
```

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]

1. Source Code(Nested Interactive Loop):

```
list_input_inches = list(map(int,input().split()))
list_output_cm = []
for element in list_input_inches:
    list_output_cm.append(element * 2.54)
print(list_output_cm)
```

Output:

```
C:\Windows\System32\cmd.e  X  +  v

Microsoft Windows [Version 10.0.22621.3007]
(c) Microsoft Corporation. All rights reserved.

F:\Assignments\Assignment2>python nestedinteractiveloop.py
150 155 145 148
[381.0, 393.7, 368.3, 375.92]

F:\Assignments\Assignment2>
```

2.Source Code(list comprehension):

```
list_input_inches = [i for i in list(map(int,input().split()))]
list_output_cm = [cm * 2.54 for cm in list_input_inches]
print(list_output_cm)
```

Output:

```
C:\Windows\System32\cmd.e  X  +  v

F:\Assignments\Assignment2>python listcomprehension.py
150 155 145 148
[381.0, 393.7, 368.3, 375.92]

F:\Assignments\Assignment2>
```