Neural Networks & Deep Learning: ICP2
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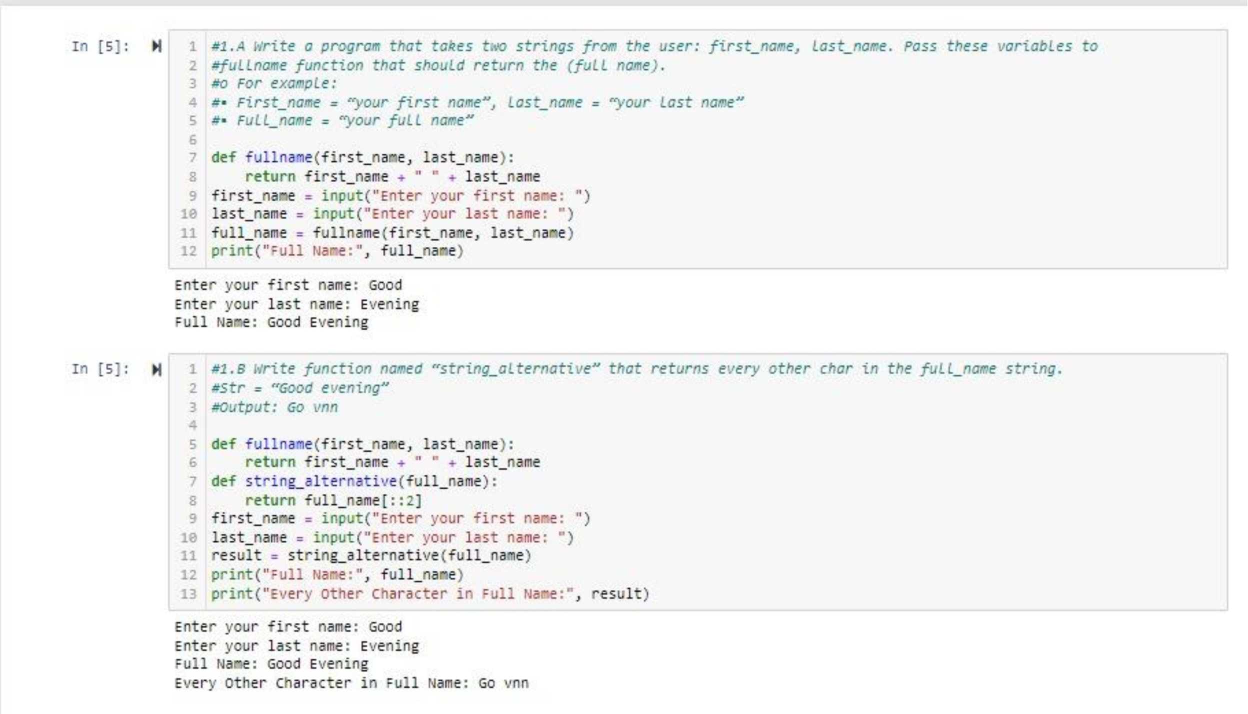
1.a. Write a program that takes two strings from the user: first_name, last_name. Pass these variables to
fullname function that should return the (full name).

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

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.

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



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#1.A 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”

def fullname(first_name, last_name):
    return first_name + " " + last_name
first_name = input("Enter your first name: ")
last_name = input("Enter your last name: ")
full_name = fullname(first_name, last_name)
print("Full Name:", full_name)
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```
Enter your first name: Good
Enter your last name: Evening
Full Name: Good Evening
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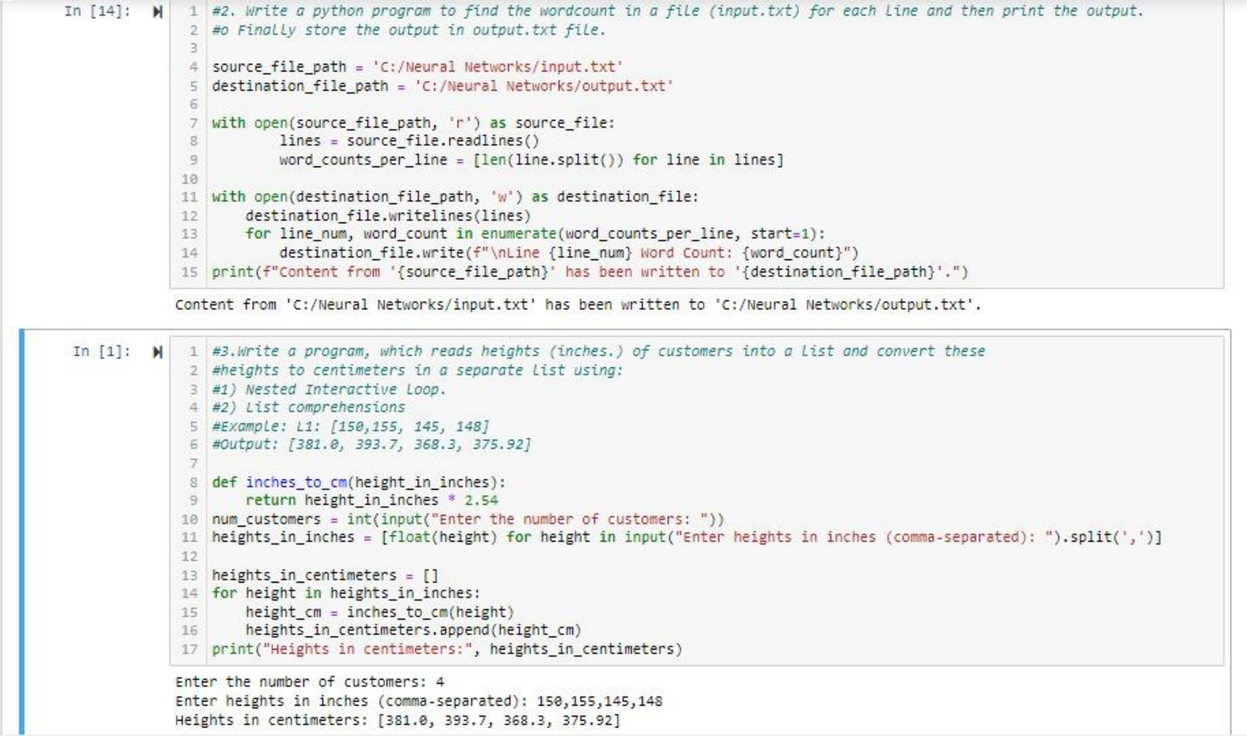
#1.B Write function named “string_alternative” that returns every other char in the full_name string.
#Str = “Good evening”
#Output: Go vnn

def fullname(first_name, last_name):
    return first_name + " " + last_name
def string_alternative(full_name):
    return full_name[::2]
first_name = input("Enter your first name: ")
last_name = input("Enter your last name: ")
result = string_alternative(full_name)
print("Full Name:", full_name)
print("Every Other Character in Full Name:", result)
```

```
Enter your first name: Good
Enter your last name: Evening
Full Name: Good Evening
Every Other Character in Full Name: Go vnn
```



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#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.

source_file_path = 'C:/Neural Networks/input.txt'
destination_file_path = 'C:/Neural Networks/output.txt'

with open(source_file_path, 'r') as source_file:
        lines = source_file.readlines()
        word_counts_per_line = [len(line.split()) for line in lines]

with open(destination_file_path, 'w') as destination_file:
    destination_file.writelines(lines)
    for line_num, word_count in enumerate(word_counts_per_line, start=1):
        destination_file.write(f"\nLine {line_num} Word Count: {word_count}")
print(f"Content from '{source_file_path}' has been written to '{destination_file_path}'.")
```

```
Content from 'C:/Neural Networks/input.txt' has been written to 'C:/Neural Networks/output.txt'.
```

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#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: [381.0, 393.7, 368.3, 375.92]

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)
```

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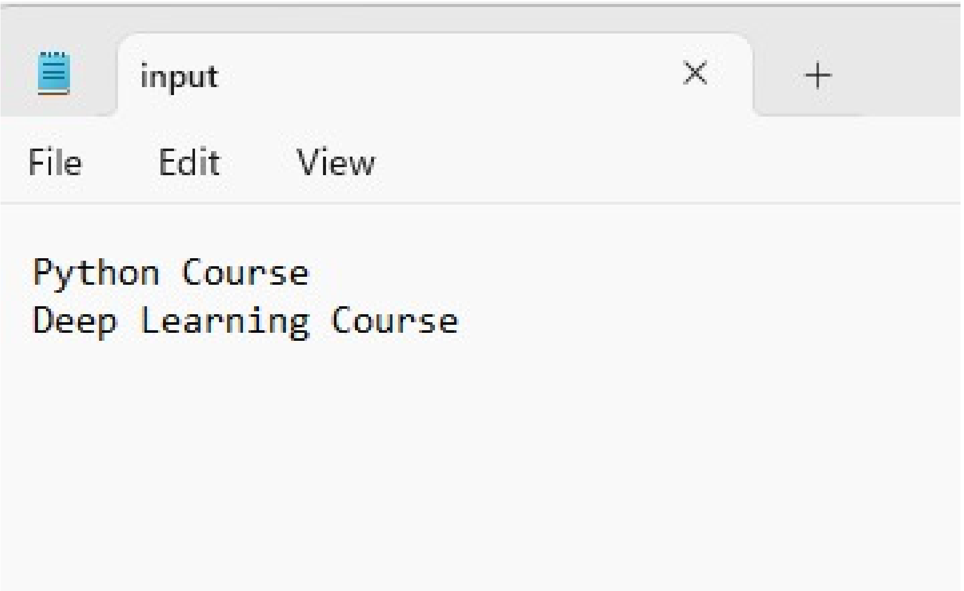
Enter the number of customers: 4
Enter heights in inches (comma-separated): 150,155,145,148
Heights in centimeters: [381.0, 393.7, 368.3, 375.92]
```



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Python Course
Deep Learning Course
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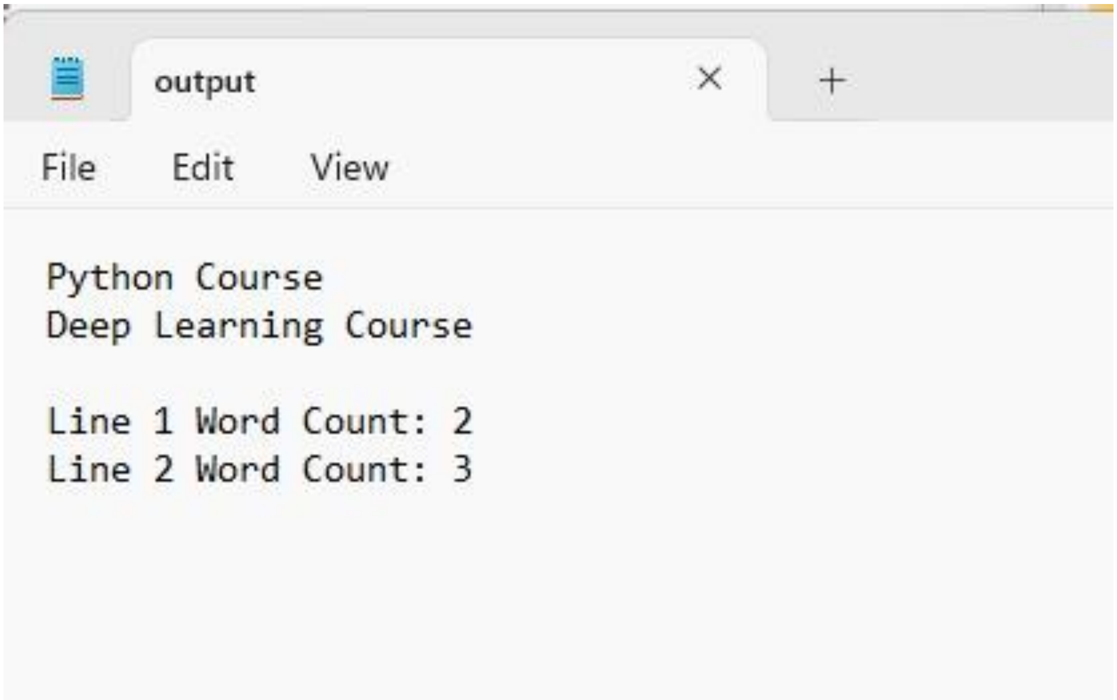

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Line 1 Word Count: 2
Line 2 Word Count: 3
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GitHub Link : https://github.com/sowjanya-kamuju/Assignment2/tree/main

Video Link : https://vimeo.com/903945825/df61ff783a?share=copy