

- GitHub Link: [https://github.com/saivardhan-dev/Neural-Networks\\_Assignment-2\\_700756163.git](https://github.com/saivardhan-dev/Neural-Networks_Assignment-2_700756163.git)
- Video Link: [https://drive.google.com/file/d/1YDMxMTqvfc8G4M9JCUWLxnb-7wVl6UeN/view?usp=drive\\_link](https://drive.google.com/file/d/1YDMxMTqvfc8G4M9JCUWLxnb-7wVl6UeN/view?usp=drive_link)

I. 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).

- For example:

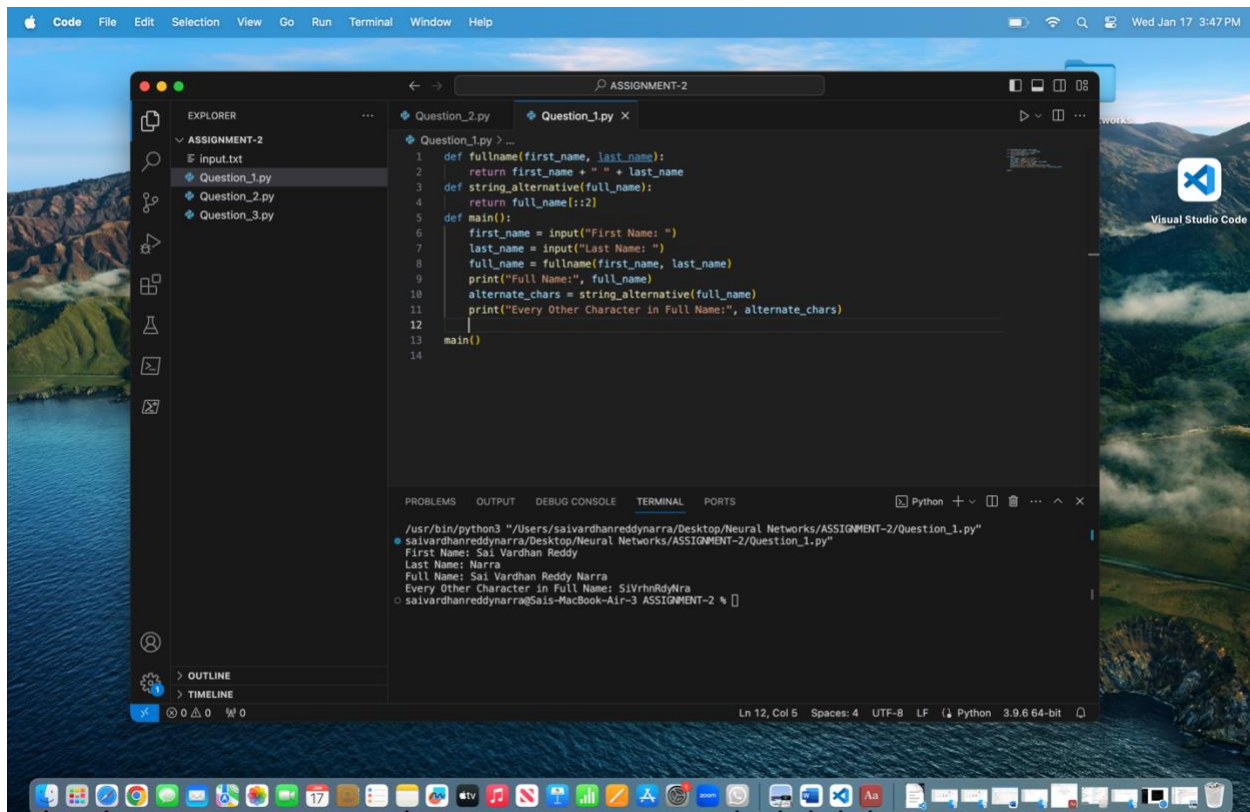
First\_name = "your first name", last\_name = "your last name"

Full\_name = "your full name"

- Write function named "string\_alternative" that returns every other char in the full\_name string.

Str = "Good evening"

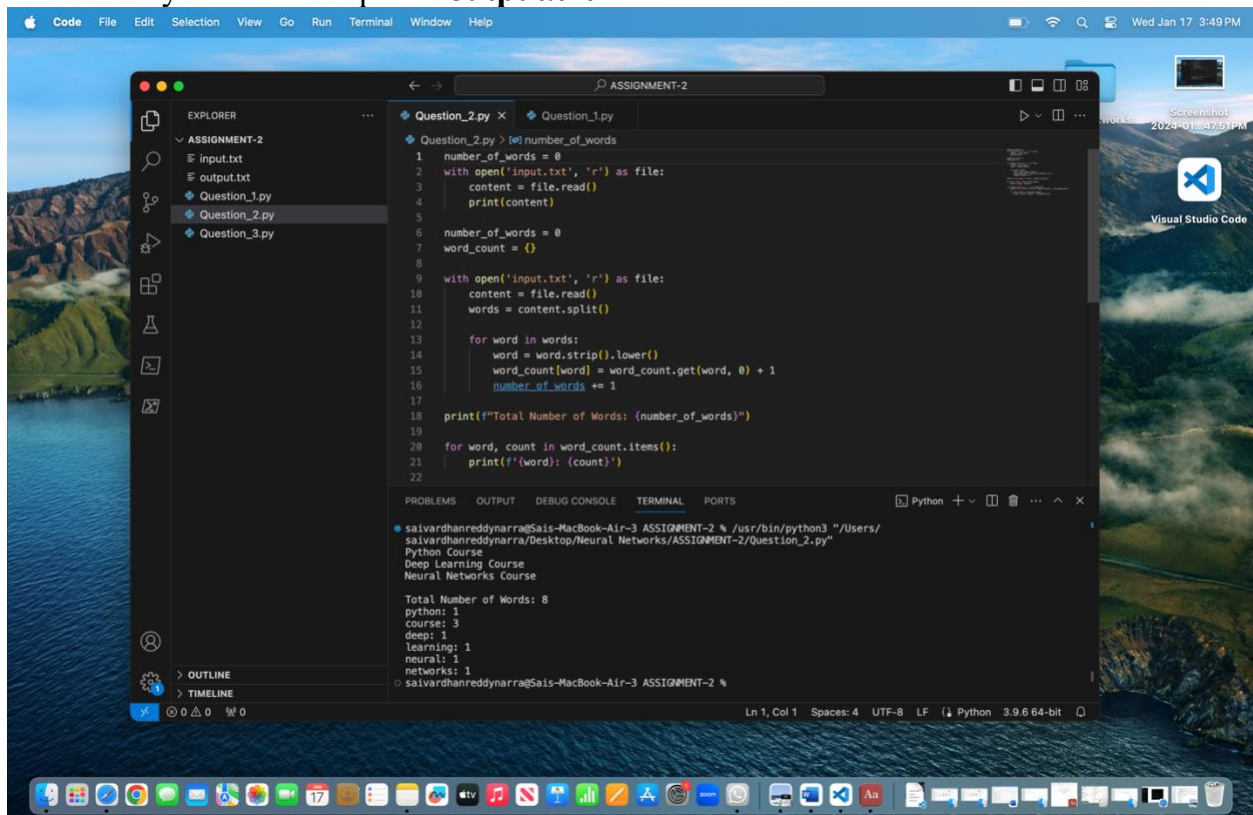
Output: Go vnn



```
def fullname(first_name, last_name):  
    return first_name + " " + last_name  
  
def string_alternative(full_name):  
    return full_name[::2]  
  
def main():  
    first_name = input("First Name: ")  
    last_name = input("Last Name: ")  
    full_name = fullname(first_name, last_name)  
    print("Full Name:", full_name)  
    alternate_chars = string_alternative(full_name)  
    print("Every Other Character in Full Name:", alternate_chars)  
  
main()
```

```
/usr/bin/python3 /Users/saivardhanreddynarra/Desktop/Neural Networks/ASSIGNMENT-2/Question_1.py  
saivardhanreddynarra/Desktop/Neural Networks/ASSIGNMENT-2/Question_1.py  
First Name: Sai Vardhan Reddy  
Last Name: Narra  
Full Name: Sai Vardhan Reddy Narra  
Every Other Character in Full Name: SIVrhRdyNrRa  
saivardhanreddynarra@Sais-MacBook-Air-3 ASSIGNMENT-2 %
```

- II. 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.



The screenshot shows a Visual Studio Code editor window titled 'ASSIGNMENT-2'. The Explorer panel on the left shows a file structure with 'ASSIGNMENT-2' containing 'input.txt', 'output.txt', 'Question\_1.py', 'Question\_2.py', and 'Question\_3.py'. The main editor area displays the code for 'Question\_2.py'. The code reads the content of 'input.txt', splits it into words, and counts the frequency of each word. The output is printed to the terminal.

```
1 number_of_words = 0
2 with open('input.txt', 'r') as file:
3     content = file.read()
4     print(content)
5
6 number_of_words = 0
7 word_count = {}
8
9 with open('input.txt', 'r') as file:
10     content = file.read()
11     words = content.split()
12
13     for word in words:
14         word = word.strip().lower()
15         word_count[word] = word_count.get(word, 0) + 1
16         number_of_words += 1
17
18 print(f"Total Number of Words: {number_of_words}")
19
20 for word, count in word_count.items():
21     print(f'{word}: {count}')
22
```

The terminal output shows the execution of the program:

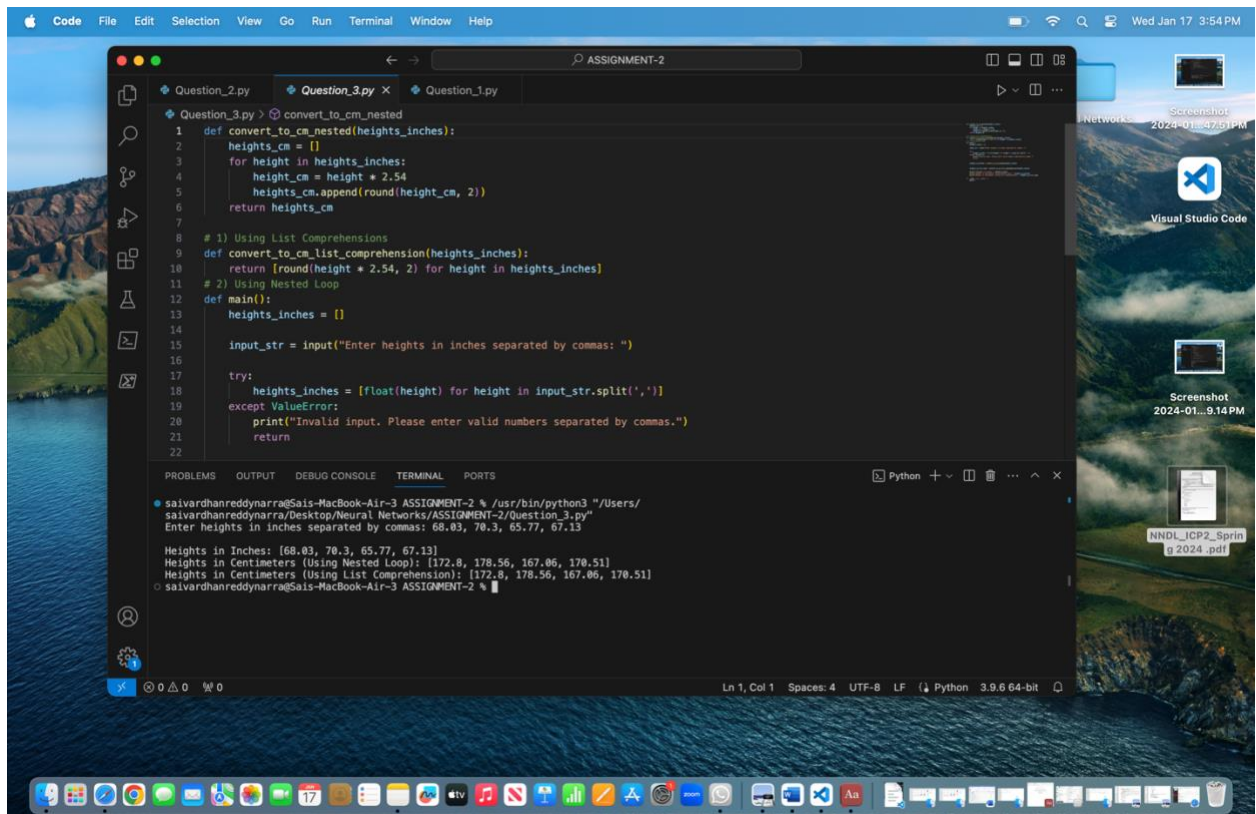
```
salvardhanreddynarra@Sais-MacBook-Air-3 ASSIGNMENT-2 % ./usr/bin/python3 "/Users/salvardhanreddynarra/Desktop/Neural Networks/ASSIGNMENT-2/Question_2.py"
Python Course
Deep Learning Course
Neural Networks Course

Total Number of Words: 8
python: 1
course: 3
deep: 1
learning: 1
neural: 1
networks: 1
salvardhanreddynarra@Sais-MacBook-Air-3 ASSIGNMENT-2 %
```

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

## Neural Networks & Deep Learning Assignment - 2

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```
Code File Edit Selection View Go Run Terminal Window Help
ASSIGNMENT-2
Question_2.py Question_3.py Question_1.py
def convert_to_cm_nested(heights_inches):
    heights_cm = []
    for height in heights_inches:
        height_cm = height * 2.54
        heights_cm.append(round(height_cm, 2))
    return heights_cm

# 1) Using List Comprehensions
def convert_to_cm_list_comprehension(heights_inches):
    return [round(height * 2.54, 2) for height in heights_inches]

# 2) Using Nested Loop
def main():
    heights_inches = []

    input_str = input("Enter heights in inches separated by commas: ")

    try:
        heights_inches = [float(height) for height in input_str.split(',')]
    except ValueError:
        print("Invalid input. Please enter valid numbers separated by commas.")
    return

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Python + - [] ... ^ x

saivardhanreddynarra@Sais-MacBook-Air-3 ASSIGNMENT-2 % /usr/bin/python3 "/Users/
saivardhanreddynarra/Desktop/Neural Networks/ASSIGNMENT-2/Question_3.py"
Enter heights in inches separated by commas: 68.83, 70.3, 65.77, 67.13

Heights in Inches: [68.83, 70.3, 65.77, 67.13]
Heights in Centimeters (Using Nested Loop): [172.8, 178.56, 167.06, 170.51]
Heights in Centimeters (Using List Comprehension): [172.8, 178.56, 167.06, 170.51]
saivardhanreddynarra@Sais-MacBook-Air-3 ASSIGNMENT-2 %
```