Assignment-2

GITHUB URL:

https://github.com/varshathatikonda23

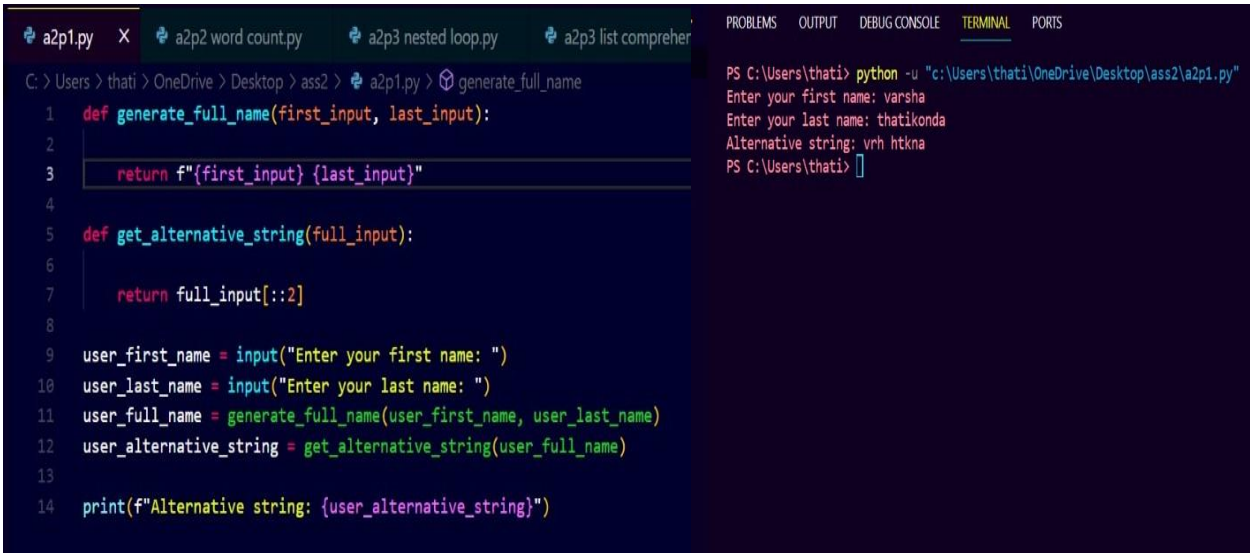
2nd assignment 2 URL:

https://github.com/varshathatikonda23/Neural-Ass-2

recording:

https://drive.google.com/file/d/11YvcBIGCLYrmgUOMrDhVIkjS8sgEDaxa/view?usp=sharing

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).



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
from collections import Counter

def calculate_word_counts_per_line(input_filepath, output_filepath):
    """Calculates word counts for each line in an input file and writes them, along with the original lines, to an ou

    try:
        with open(input_filepath, 'r') as input_file:
            input_lines = input_file.readlines()

        word_counts_per_line = [(line.strip(), len(line.split())) for line in input_lines]

        with open(output_filepath, 'w') as output_file:
            for line, word_count in word_counts_per_line:
                output_file.write(f"{line}\nWord_Count:\n")
                for word, count in Counter(line.split()).items():
                    output_file.write(f"{word}: {count}\n")
                output_file.write(f"Total_Words: {word_count}\n\n")

        print(f"Word counts along with the original lines written to '{output_filepath}' successfully.")

    except FileNotFoundError:
        print(f"Error: Input file '{input_filepath}' not found.")
    except IOError as e:
        print(f"Error: An error occurred while reading or writing files: {e}")

if __name__ == "__main__":
    input_filepath = "input.txt"
    output_filepath = "output.txt"
    calculate_word_counts_per_line(input_filepath, output_filepath)
```

output:

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

PS C:\Users\thati> python -u "c:\Users\thati\OneDrive\Desktop\ass2\a2p2 word count.py"
Word counts along with the original lines written to 'output.txt' successfully.
PS C:\Users\thati>
```

output | input

File Edit View

```
Python Course
Deep Learning Course
```

input | input | output

File Edit View

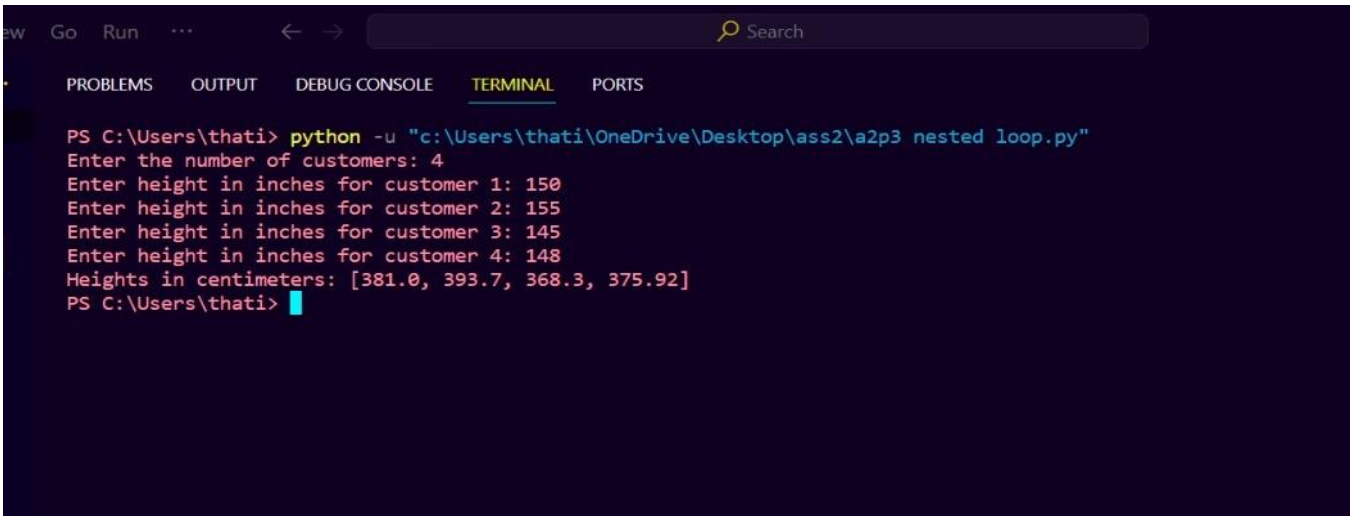
```
Python Course
Word_Count:
Python: 1
Course: 1
Total_Words: 2

Deep Learning Course
Word_Count:
Deep: 1
Learning: 1
Course: 1
Total_Words: 3
```

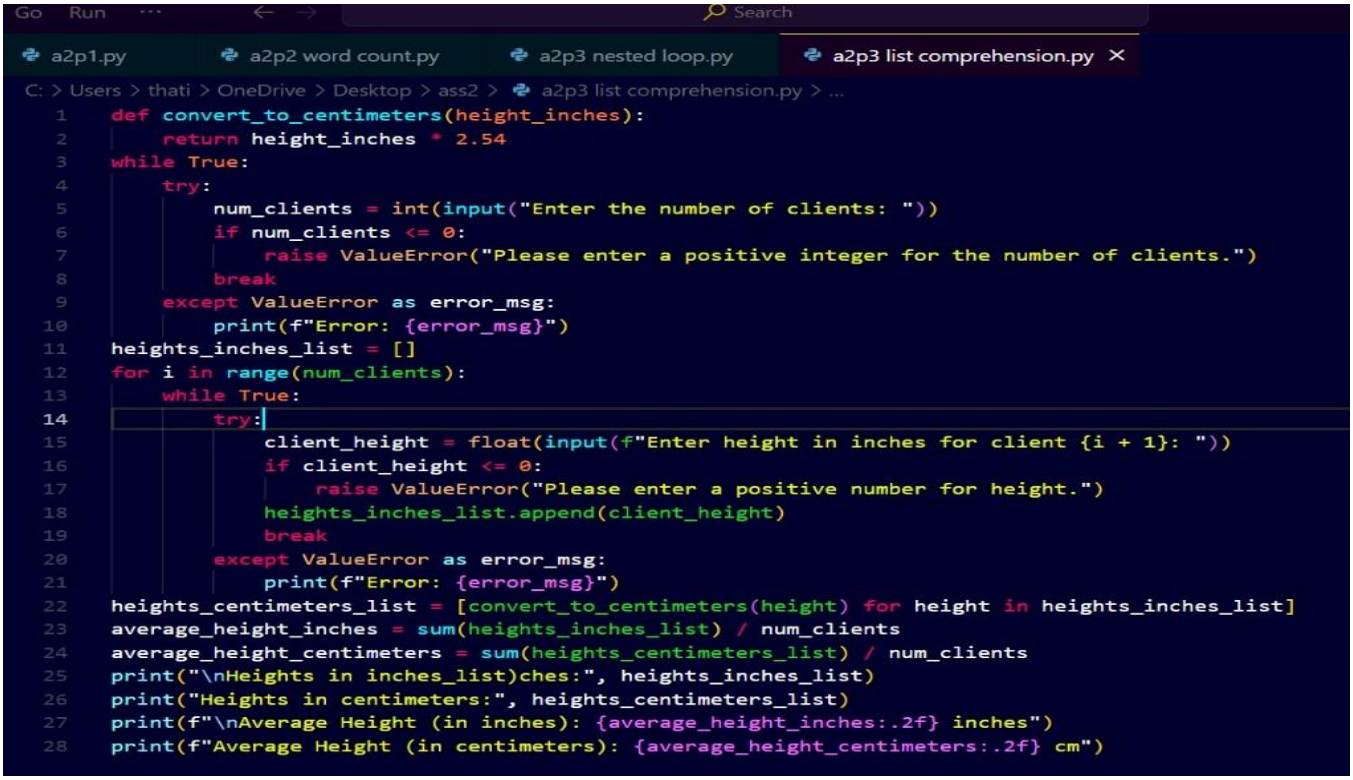
3. Write a program, which reads heights (inches.) of customers into a list and convert these heights to centimeters in a separate list using:

1) **Nested Interactive loop.**

Output:



2) **List comprehensions**.



Output: