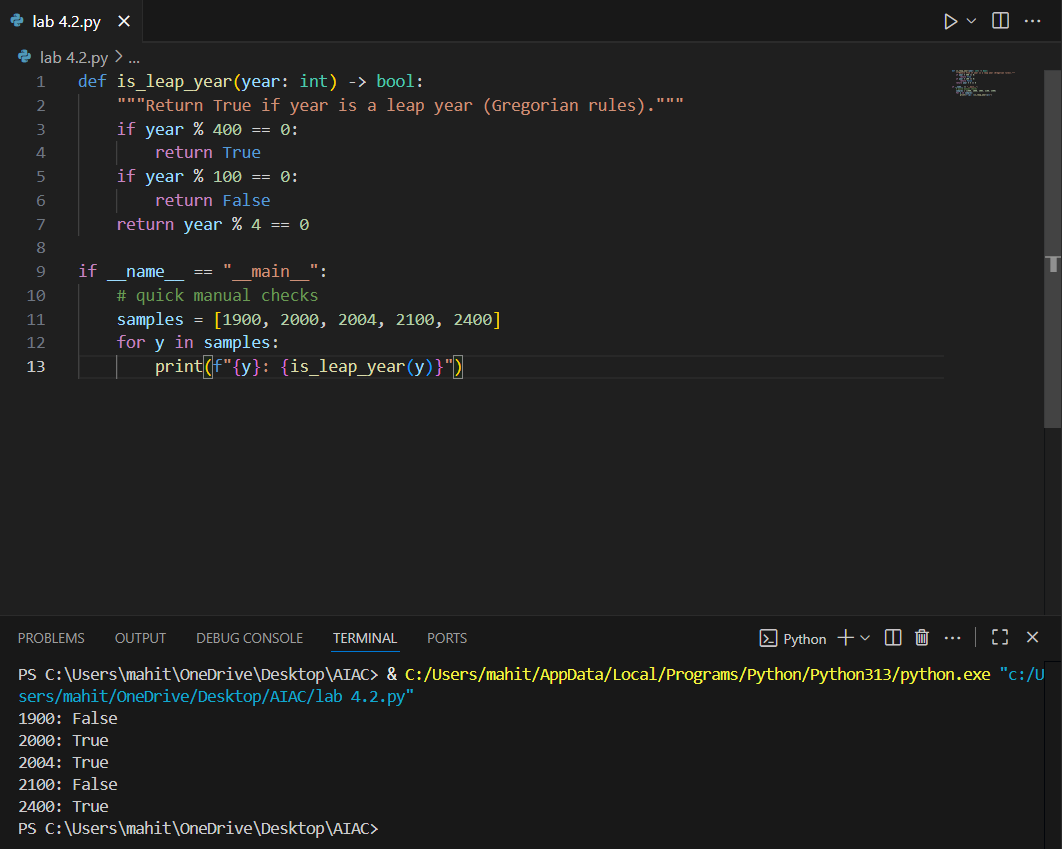
# LAB ASSIGNMENT-4

TASK-1:

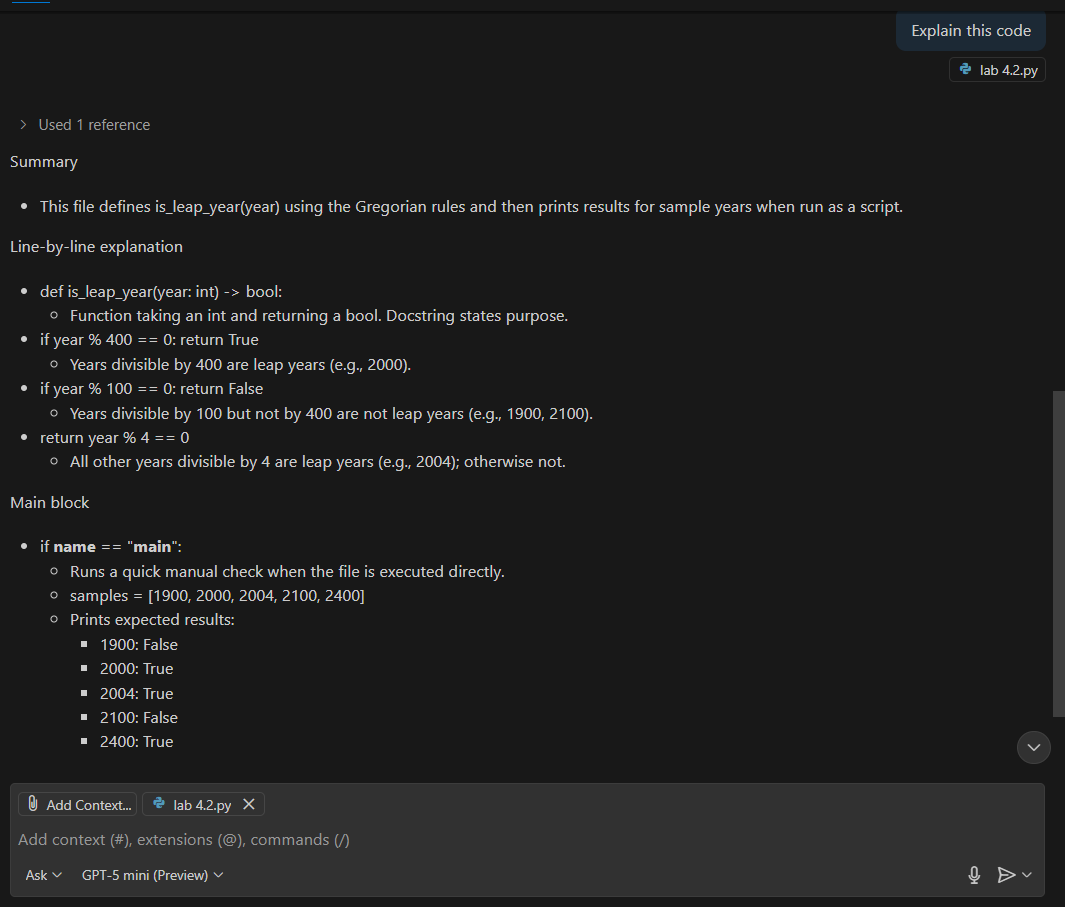
Prompt:

write a function that checks whether a given year is a leap year.

Code and Output:



Code Explanation:



TASK-2:

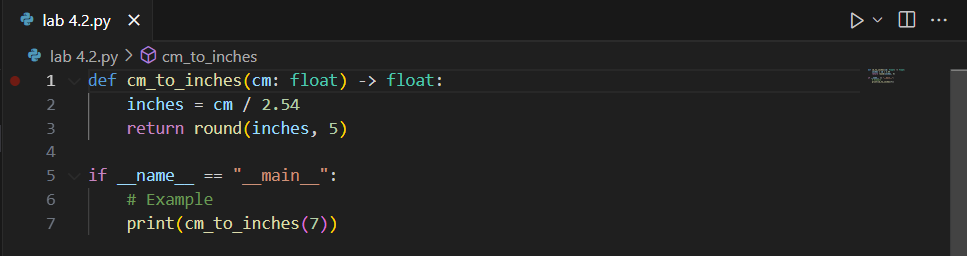
Prompt:

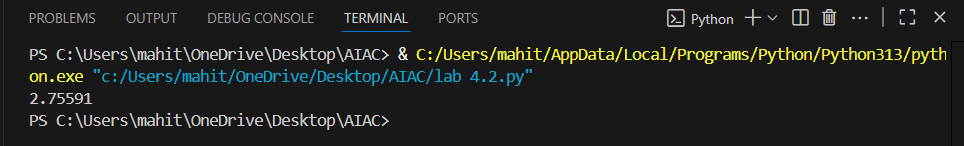
write a python function that converts centimeters to inches.

Input: 7

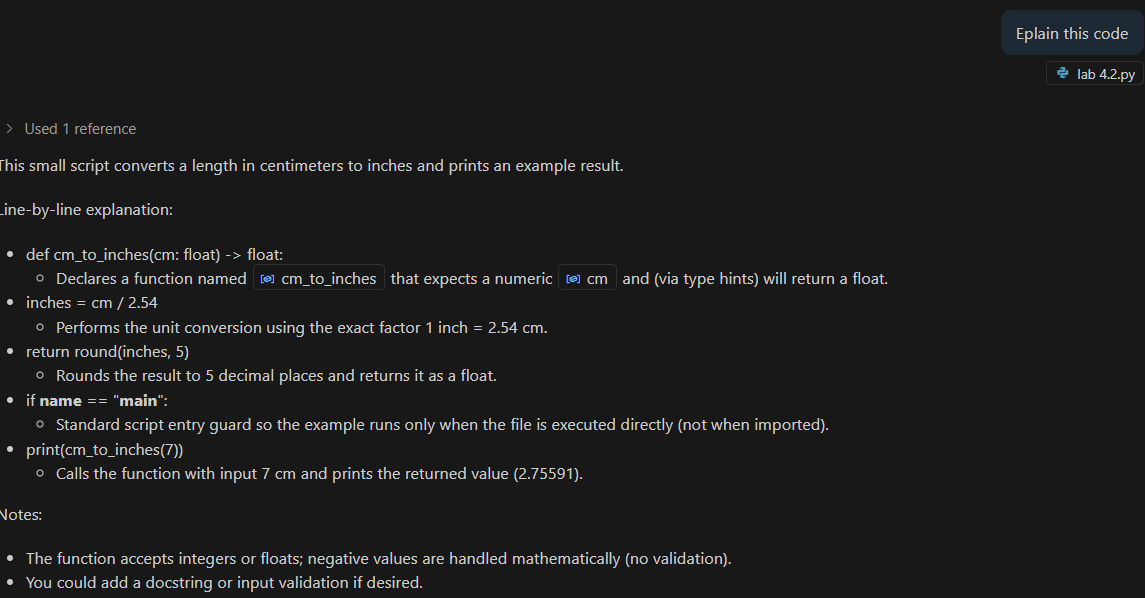
Output: 2.75591

Code and Output:





Code Explanation:



TASK-3:

Prompt:

write a python code using function that formats full names as “Last, First” where user enters full names

Examples inputs and outputs are:

Input: Naroju Mahitej

Output: "Naroju, Mahitej"

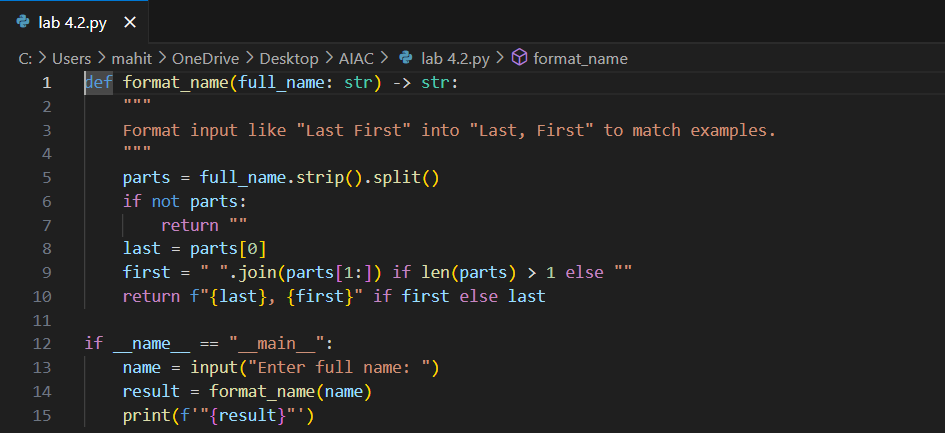
Input; Muthoju Sathya

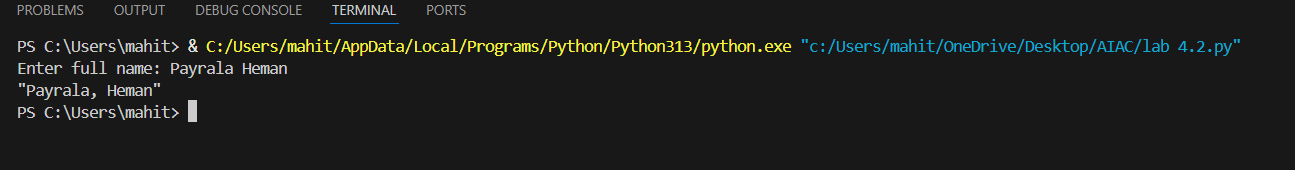
output: "Muthoju, Sathya"

Input: Vengaldas Vivek

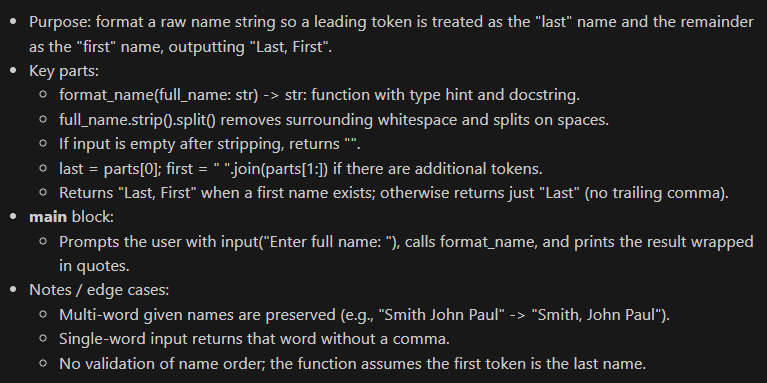
output: "Vengaldas, Vivek"

Code and Output:





Code Explanation:



TASK-4:

Prompt:

Zero short:

writing a function that counts the number of vowels in a string.

Few short:

writing a function that counts the number of vowels in a string.

Examples of input and outputs are:

input: Apple

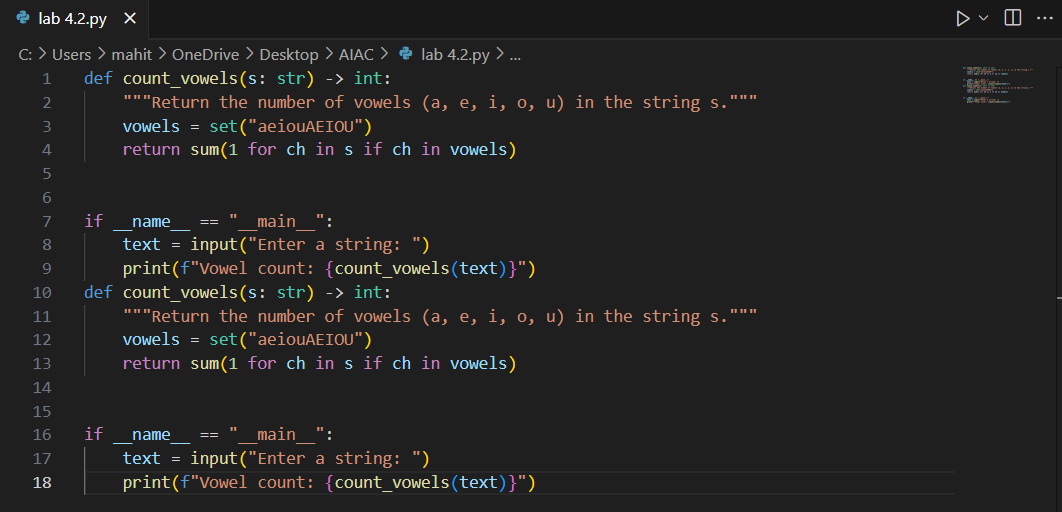
output: Vowel count: 2

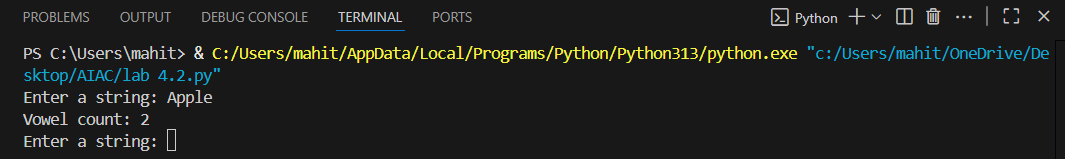
input: Mango

output: Vowel count: 2

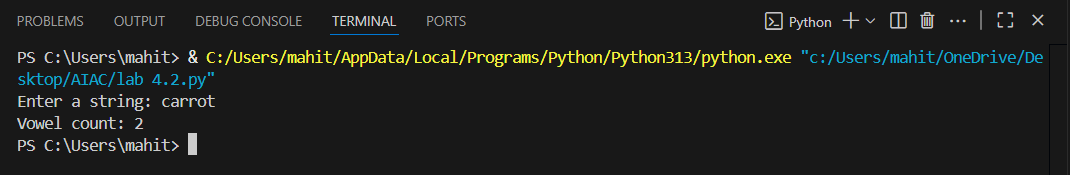
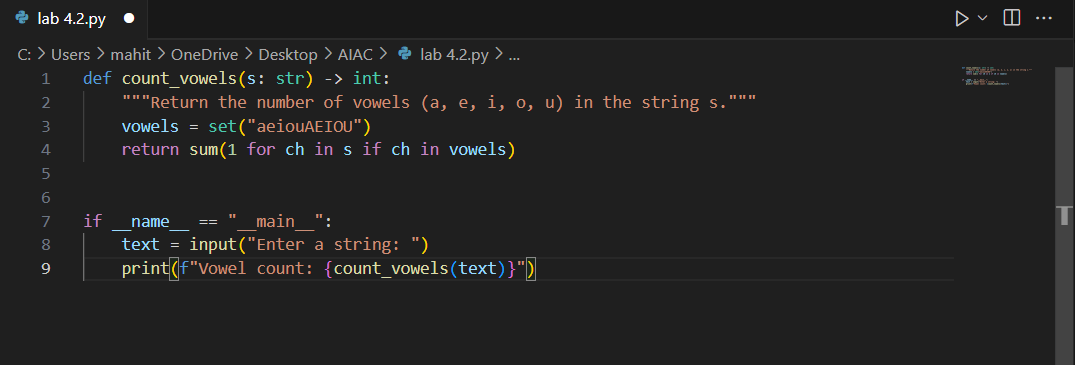
Code and Output:

Zero short:



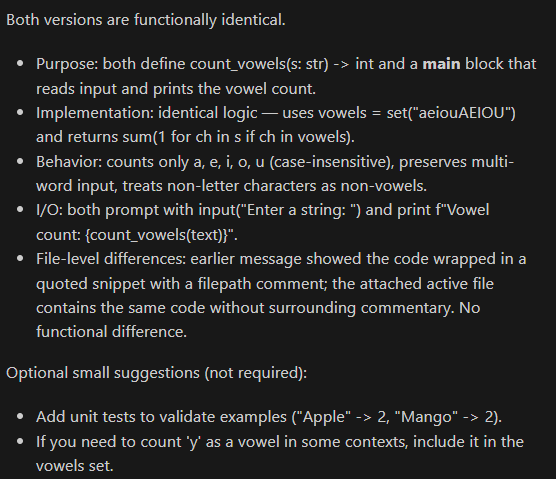


Few short:



Code Explanation:

Functional output and comparative reflection:



TASK-5:

Prompt:

# Example 1

Function: Reads a .txt file and returns the number of words.

def count\_words\_in\_file(path: str) -> int:

with open(path, 'r', encoding='utf-8') as f:

return sum(len(line.split()) for line in f)

if \_\_name\_\_ == "\_\_main\_\_":

sample\_path = r"C:\Users\mahit\OneDrive\Desktop\AIAC\apple.txt"

try:

print(count\_words\_in\_file(sample\_path))

except Exception as e:

print("Error:", e)

# Example 2

Function: Reads a .txt file and returns the number of characters.

def count\_chars\_in\_file(path: str) -> int:

with open(path, 'r', encoding='utf-8') as f:

return len(f.read())

if \_\_name\_\_ == "\_\_main\_\_":

sample\_path = r"C:\Users\mahit\OneDrive\Desktop\AIAC\apple.txt"

try:

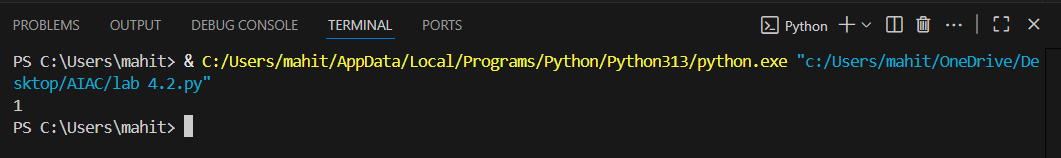
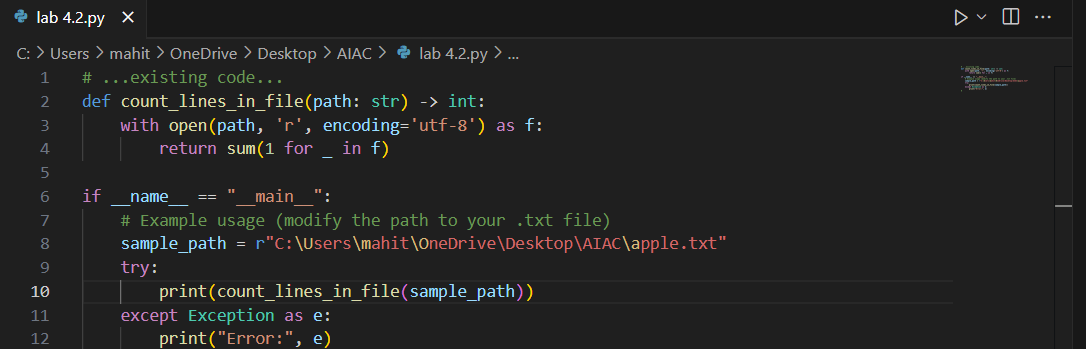
print(count\_chars\_in\_file(sample\_path))

except Exception as e:

print("Error:", e)

Now,generate a function that reads a .txt file and returns the number of lines

Code and Output:



Code Explanation:

