Name: Suthrapu Anjani
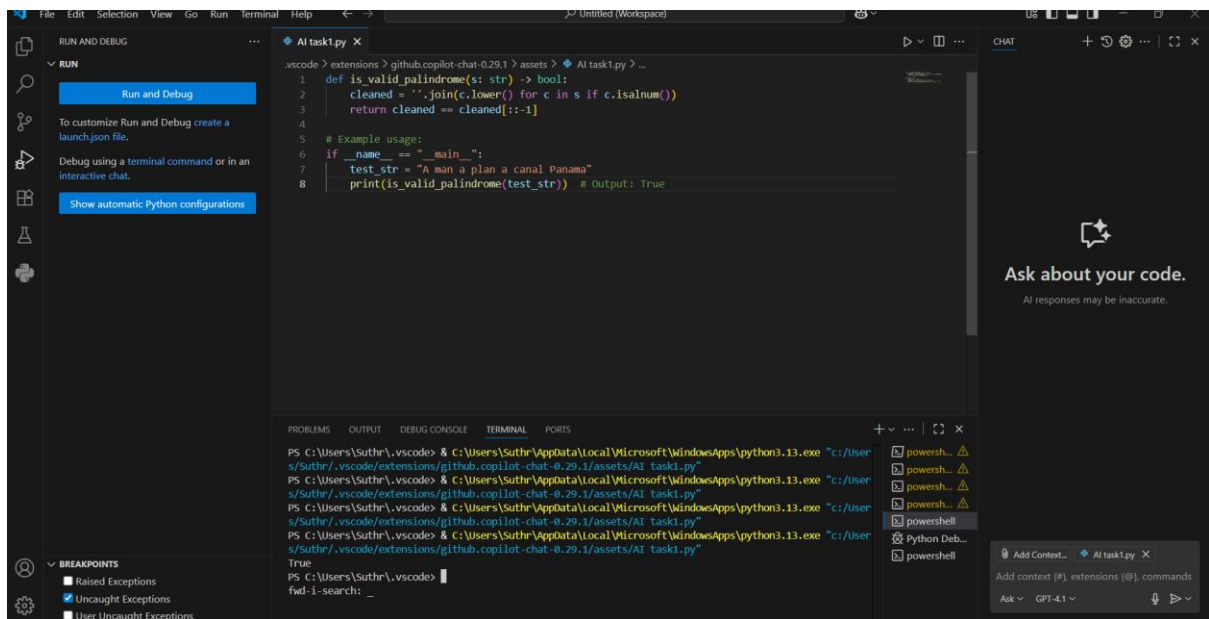
Roll No: 2403A51178

Batch No:09

Assignment 1.2

#Task 1

Function to check if a string is a valid palindrome (ignoring spaces and case) and allow Copilot to complete it.

Expected Output#1

● A function that correctly returns True for phrases like
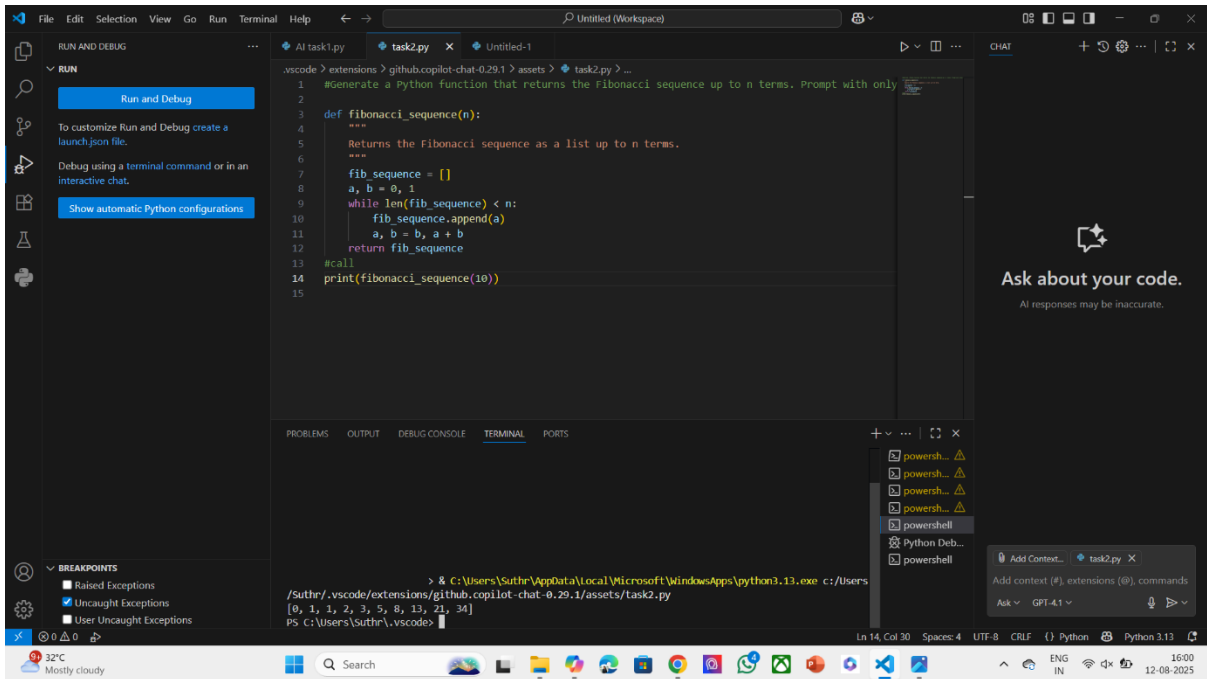
 "A man a plan a canal Panama"

Output: True

#Task 2

Generate a Python function that returns the Fibonacci sequence up to n terms.

Prompt with only a function header and docstring.
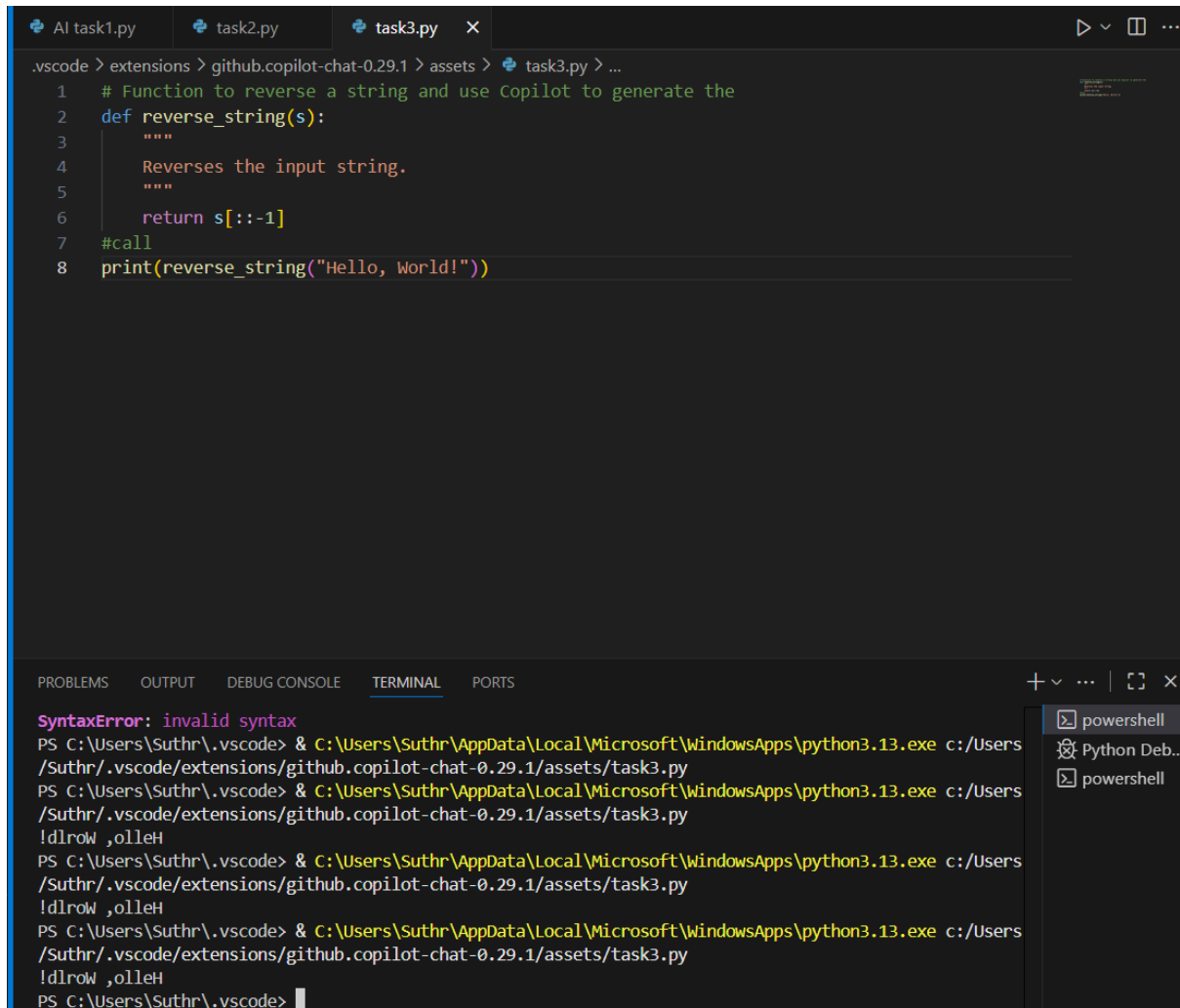
Code:

Expected Output#2

● AI completes the function logic using

 loop or recursion with accurate output

Output: [0,1,1,2,3,5,8,13,21,34]

Task 3

Write a comment like # Function to reverse a string and use Copilot to generate the function.

Code:

Expected Output#3

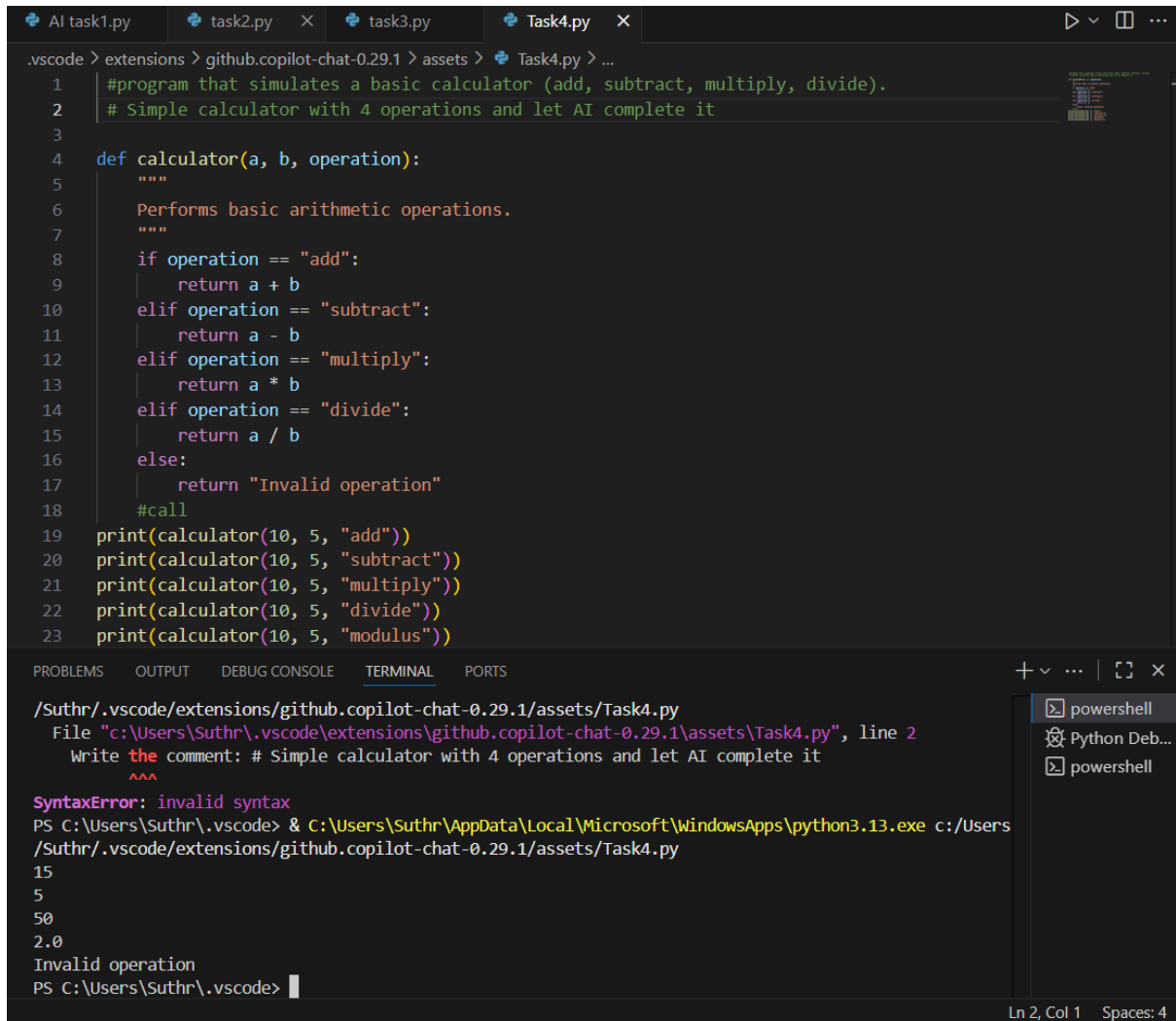● Auto-completed reverse function

Output: !dlrow ,olleH

#Task 4

Generate a program that simulates a basic calculator (add, subtract,

multiply,divide).

Simple calculator with 4 operations and let AI complete it.

Code:

```
.vscode > extensions > github.copilot-chat-0.29.1 > assets > Task4.py > ...
  1   #program that simulates a basic calculator (add, subtract, multiply, divide).
  2   # Simple calculator with 4 operations and let AI complete it
  3
  4   def calculator(a, b, operation):
  5       """
  6       Performs basic arithmetic operations.
  7       """
  8       if operation == "add":
  9           return a + b
 10       elif operation == "subtract":
 11           return a - b
 12       elif operation == "multiply":
 13           return a * b
 14       elif operation == "divide":
 15           return a / b
 16       else:
 17           return "Invalid operation"
 18       #call
 19   print(calculator(10, 5, "add"))
 20   print(calculator(10, 5, "subtract"))
 21   print(calculator(10, 5, "multiply"))
 22   print(calculator(10, 5, "divide"))
 23   print(calculator(10, 5, "modulus"))
```

```
PROBLEMS   OUTPUT   DEBUG CONSOLE   TERMINAL   PORTS

/Suthr/.vscode/extensions/github.copilot-chat-0.29.1/assets/Task4.py
  File "c:\Users\Suthr\.vscode\extensions\github.copilot-chat-0.29.1\assets\Task4.py", line 2
    Write the comment: # Simple calculator with 4 operations and let AI complete it
         ^^^
SyntaxError: invalid syntax
PS C:\Users\Suthr\.vscode> & C:\Users\Suthr\AppData\Local\Microsoft\WindowsApps\python3.13.exe c:/Users
/Suthr/.vscode/extensions/github.copilot-chat-0.29.1/assets/Task4.py
15
5
50
2.0
Invalid operation
PS C:\Users\Suthr\.vscode>
```

Expected Output#4

● Fully working calculator with input/output and operator selection logic.
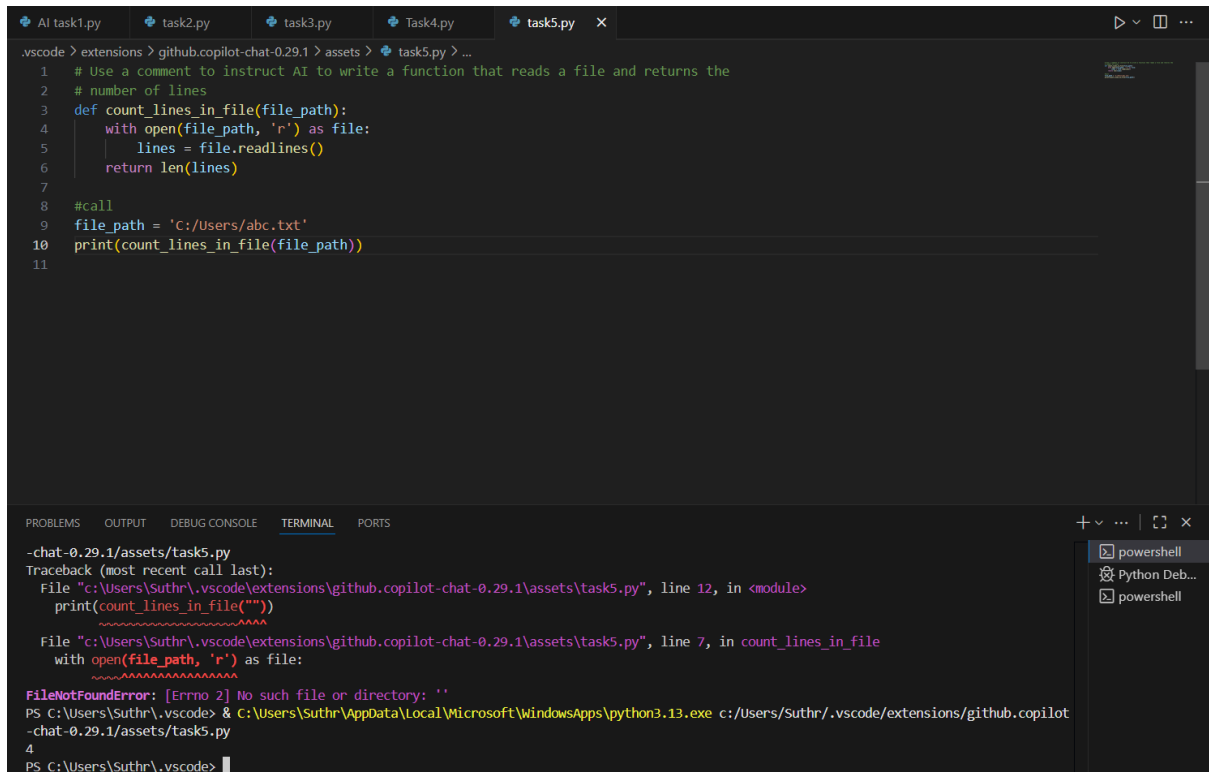
Output :15

     5

     50

     2.0

#Task 5

Use a comment to instruct AI to write a function that

reads a file and returns the number of lines..

Code:

Code:

Expected Output#5

● **Functional implementation using open() or with open() and readlines()**

Output: 4