

Name: Suthrapu Anjani

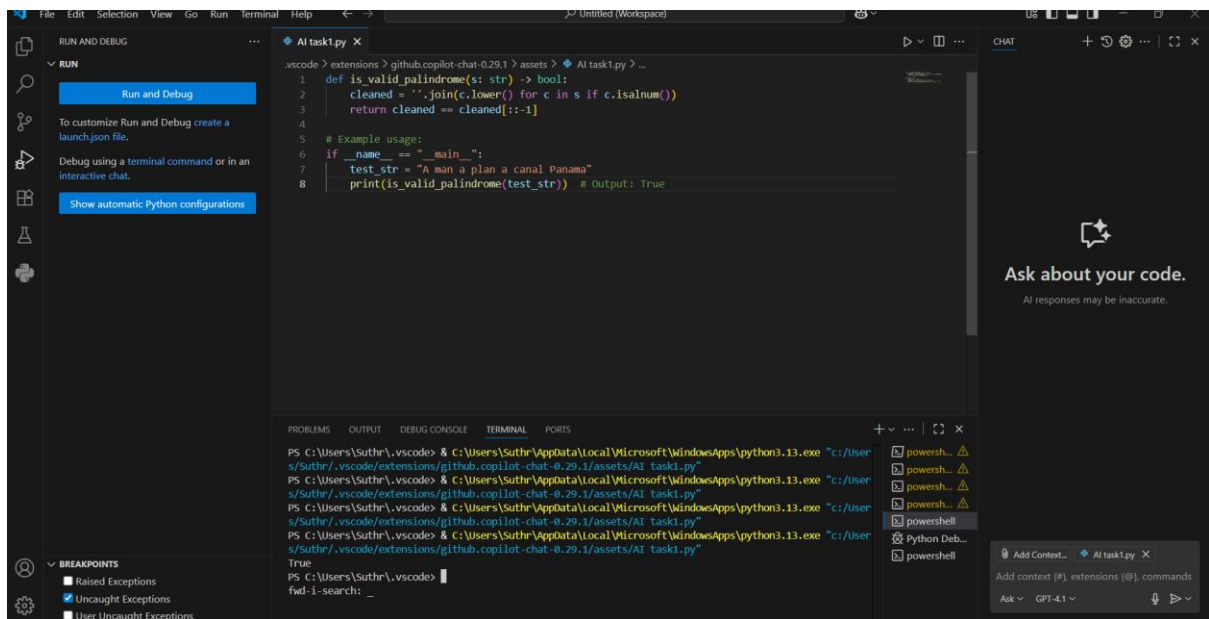
Roll No: 2403A51178

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"

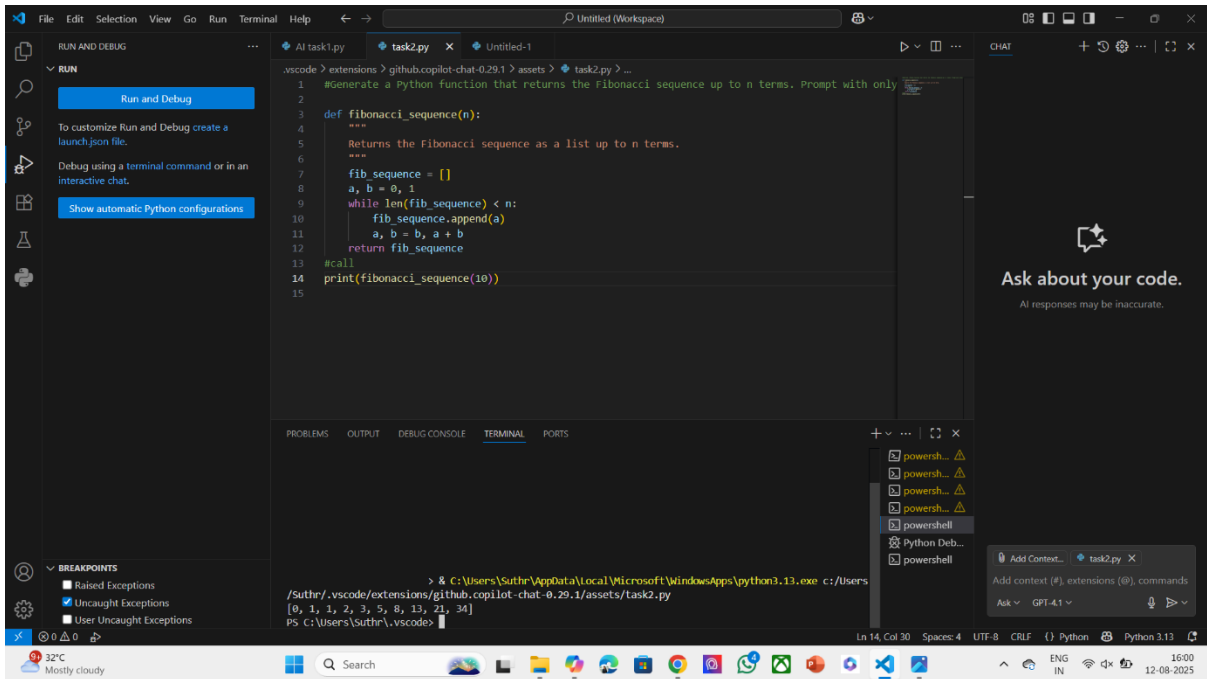
Output: True

### #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

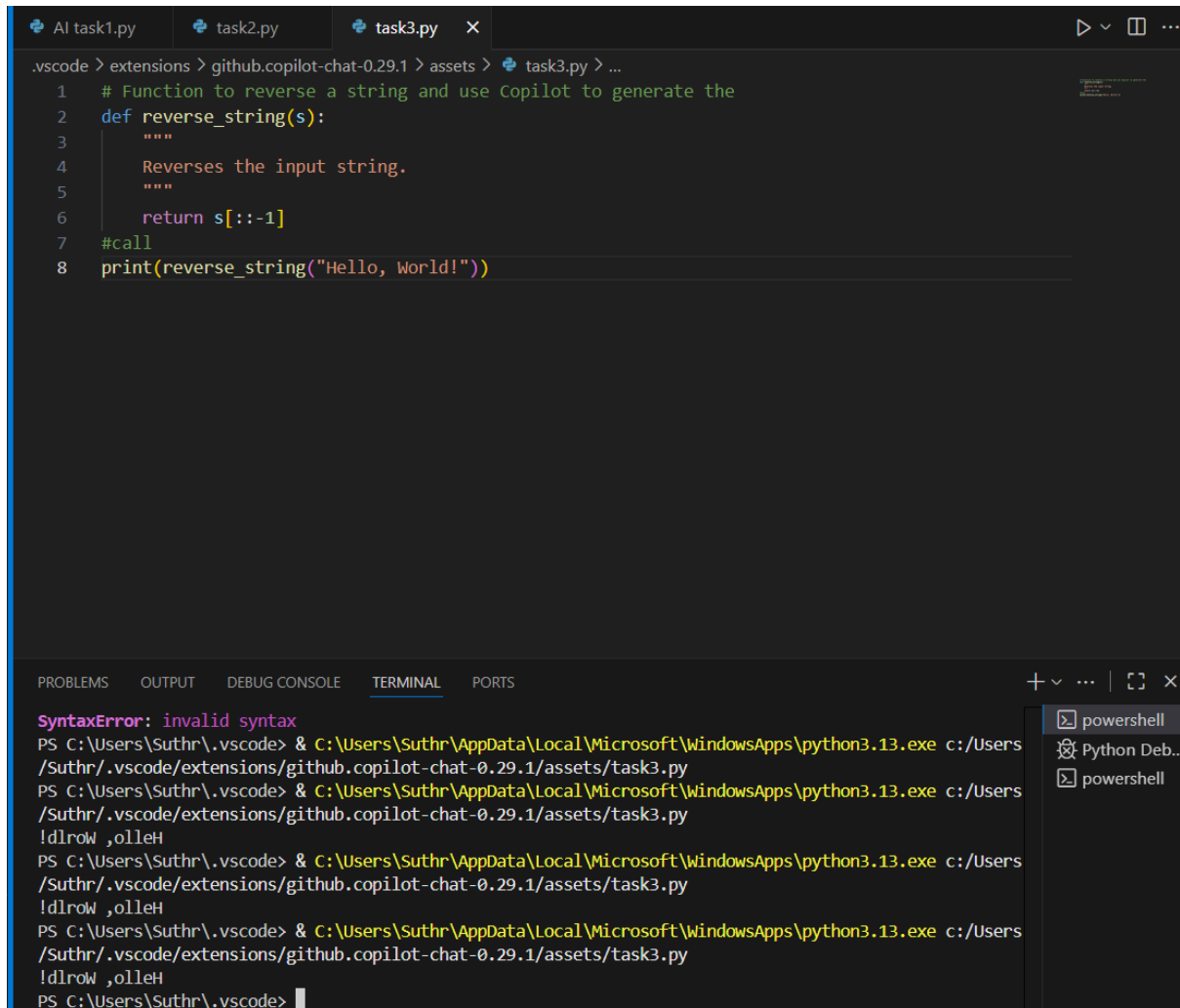
- AI completes the function logic using loop or recursion with accurate output

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:



```
.vscode > extensions > github.copilot-chat-0.29.1 > assets > task3.py > ...
1  # Function to reverse a string and use Copilot to generate the
2  def reverse_string(s):
3      """
4      Reverses the input string.
5      """
6      return s[::-1]
7  #call
8  print(reverse_string("Hello, World!"))
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

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/task3.py
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/task3.py
!dlrow ,olleH
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/task3.py
!dlrow ,olleH
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/task3.py
!dlrow ,olleH
PS C:\Users\Suthr\.vscode>
```

Expected Output#3

- Auto-completed reverse function

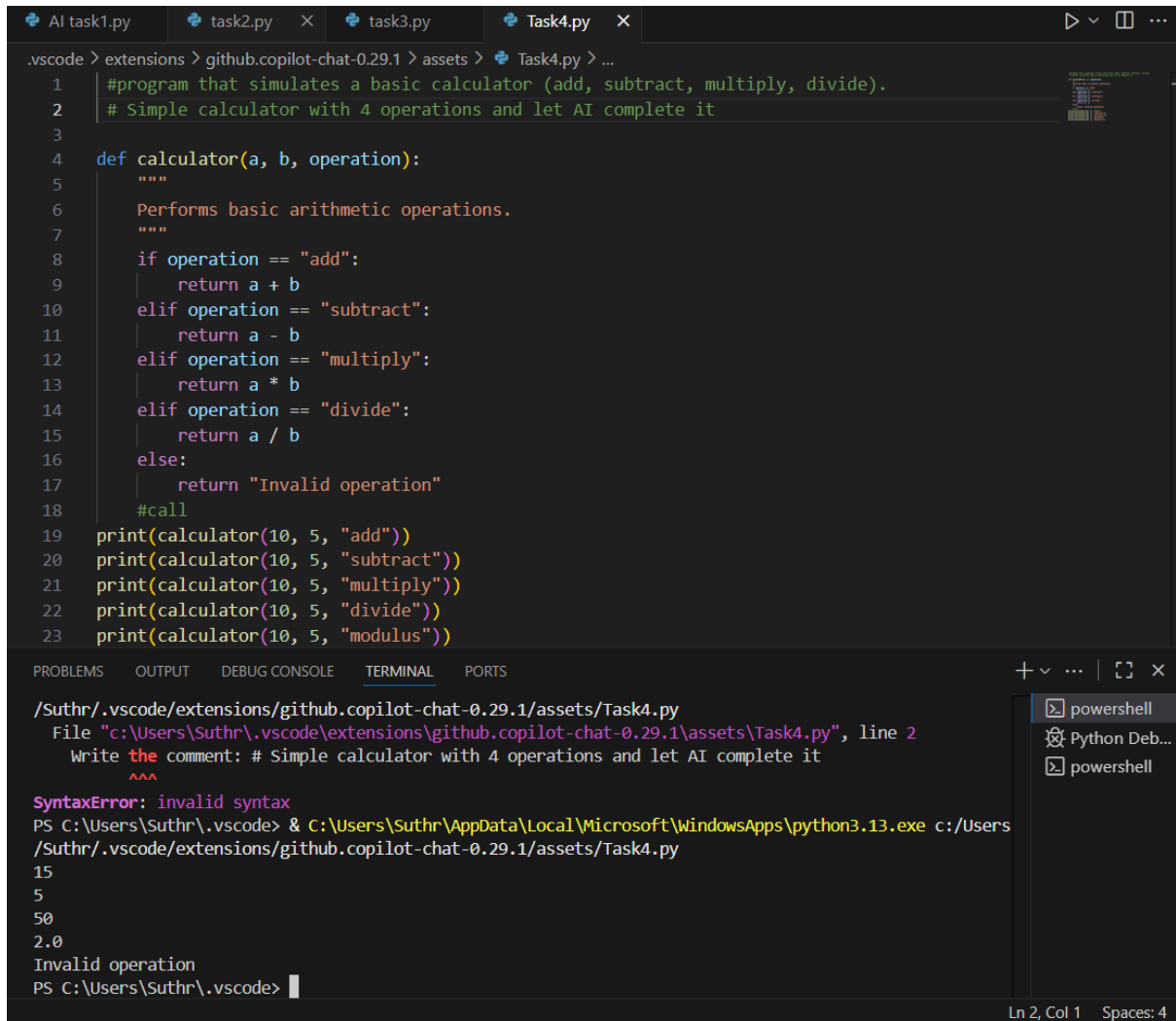
Output: !dlrow ,olleH

#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:



The screenshot shows a VS Code editor with a file named `Task4.py` open. The file contains a Python function `calculator(a, b, operation)` that performs basic arithmetic operations: add, subtract, multiply, and divide. The function also includes a comment instructing AI to complete the code. The terminal output shows the execution of the script, which prints the results of the operations: 5, 50, and 2.0. The terminal also shows a syntax error message: `SyntaxError: invalid syntax`.

```
.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

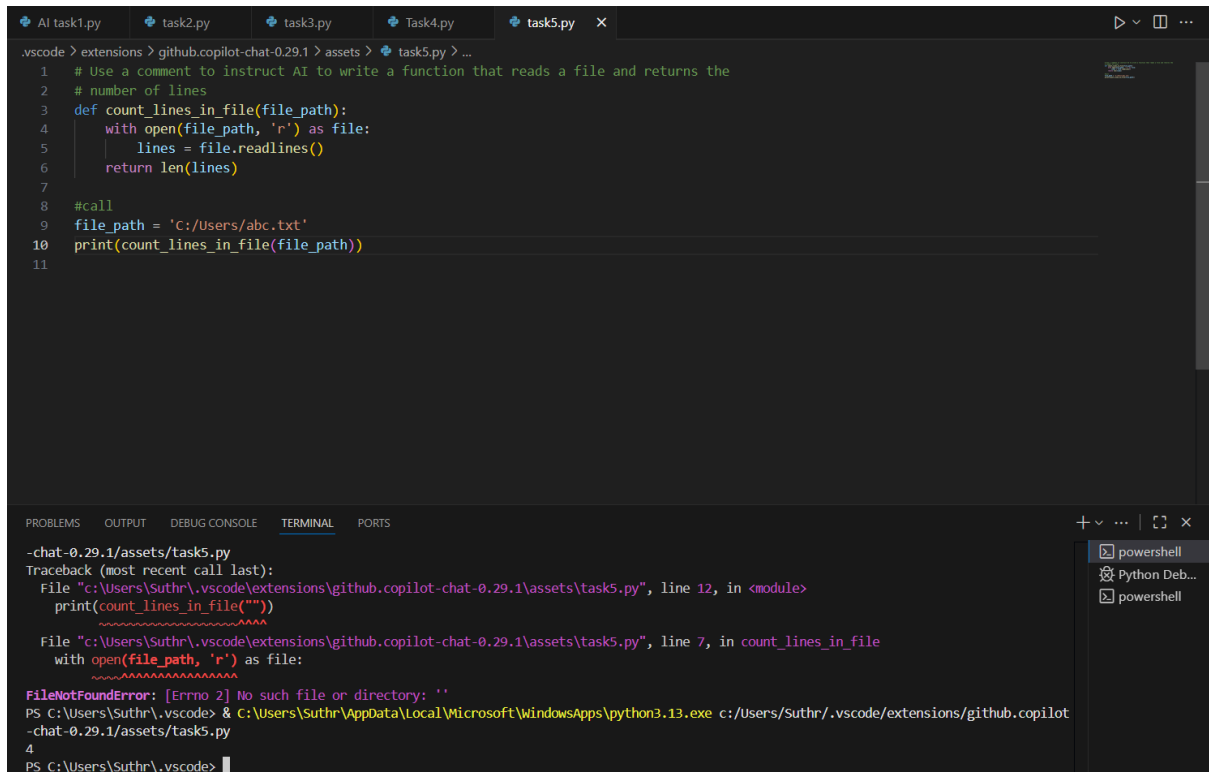
### #Task 5

Use a comment to instruct AI to write a function that

reads a file and returns the number of lines..

Code:

Code:



The screenshot shows a VS Code editor with a Python file named `task5.py` open. The code defines a function `count_lines_in_file` that takes a file path and returns the number of lines. It then calls this function with the path `'c:/Users/abc.txt'` and prints the result. The terminal at the bottom shows the execution of the script, which results in a `FileNotFoundError` because the file `c:/Users/abc.txt` does not exist.

```
.vscode > extensions > github.copilot-chat-0.29.1 > assets > task5.py > ...
1  # Use a comment to instruct AI to write a function that reads a file and returns the
2  # number of lines
3  def count_lines_in_file(file_path):
4      with open(file_path, 'r') as file:
5          lines = file.readlines()
6          return len(lines)
7
8  #call
9  file_path = 'c:/Users/abc.txt'
10 print(count_lines_in_file(file_path))
11
```

```
-chat-0.29.1/assets/task5.py
Traceback (most recent call last):
  File "c:\Users\Suthr\.vscode\extensions\github.copilot-chat-0.29.1\assets\task5.py", line 12, in <module>
    print(count_lines_in_file(""))
    ~~~~~~^~~~~~
  File "c:\Users\Suthr\.vscode\extensions\github.copilot-chat-0.29.1\assets\task5.py", line 7, in count_lines_in_file
    with open(file_path, 'r') as file:
    ~~~~~~^~~~~~
FileNotFoundError: [Errno 2] No such file or directory: ''
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/task5.py
4
PS C:\Users\Suthr\.vscode>
```

Expected Output#5

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

Output: 4