ASSIGNMENT-1

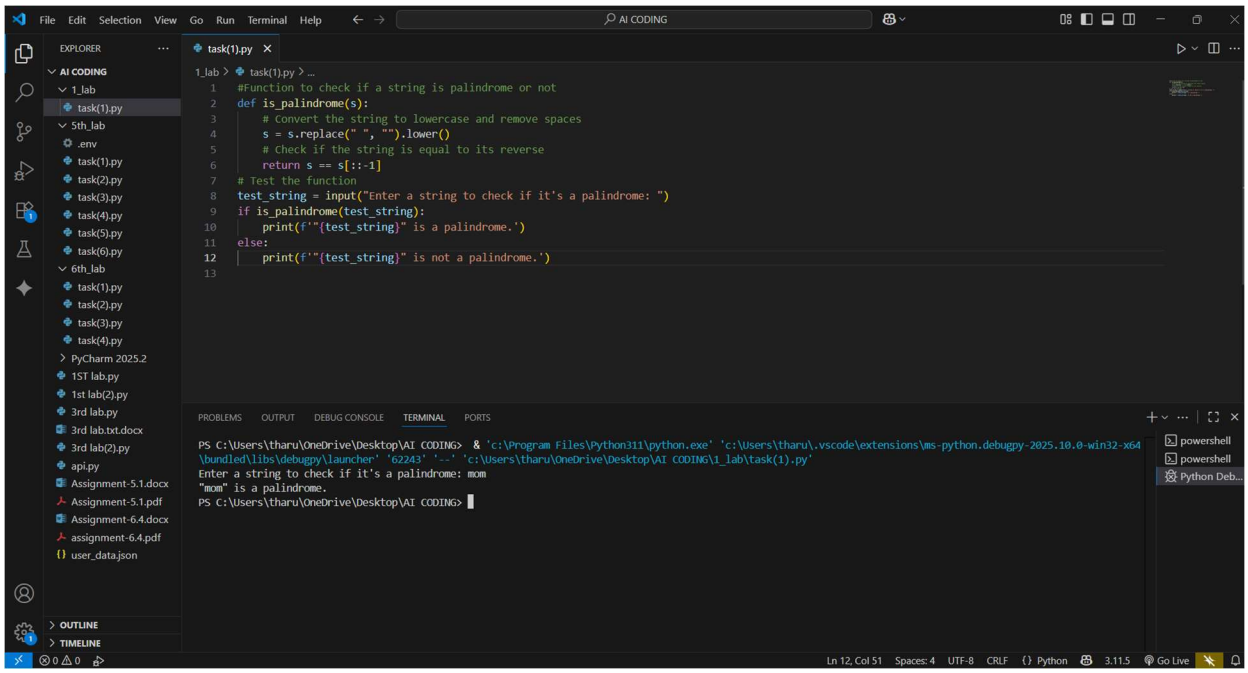
NAME: N. LAXMI PRASANNA

HT.NO: 2403A52091

BATCH: 04

Task 1:

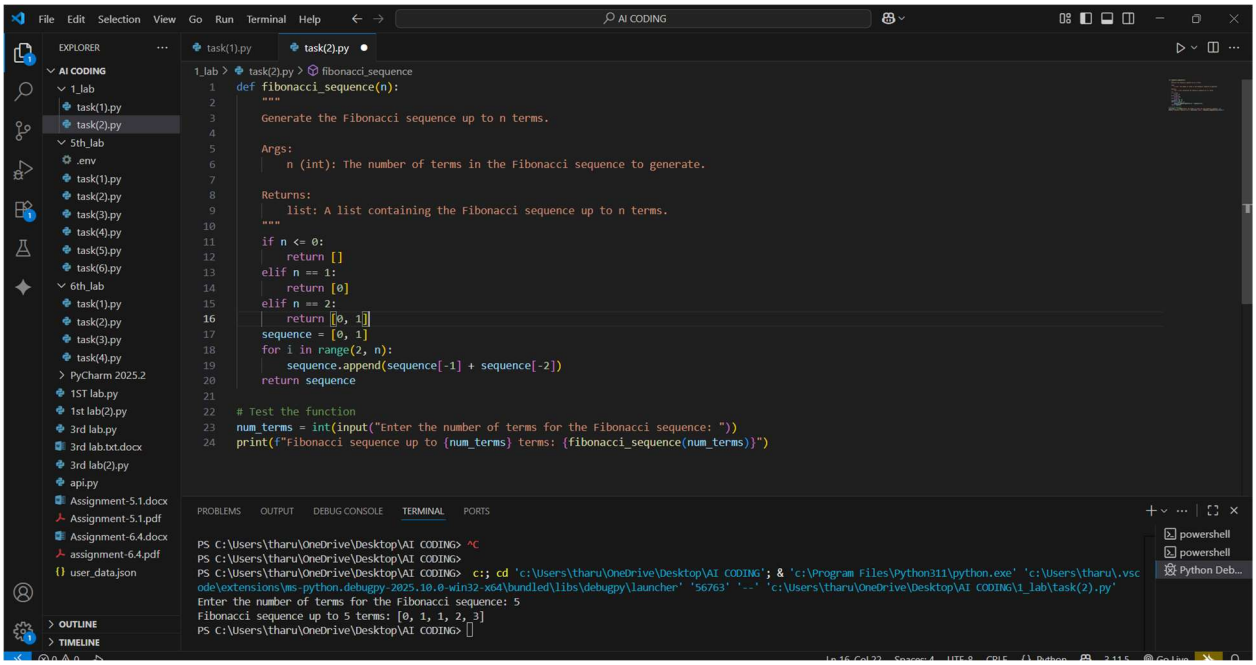
Write a comment: # Function to check if a string is a valid palindrome (ignoring spaces and case) and allow Copilot to complete it.



Task 2:

● Generate a Python function that returns the Fibonacci sequence up to n terms. Prompt
with only a function header and docstring
Expected Output#2

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



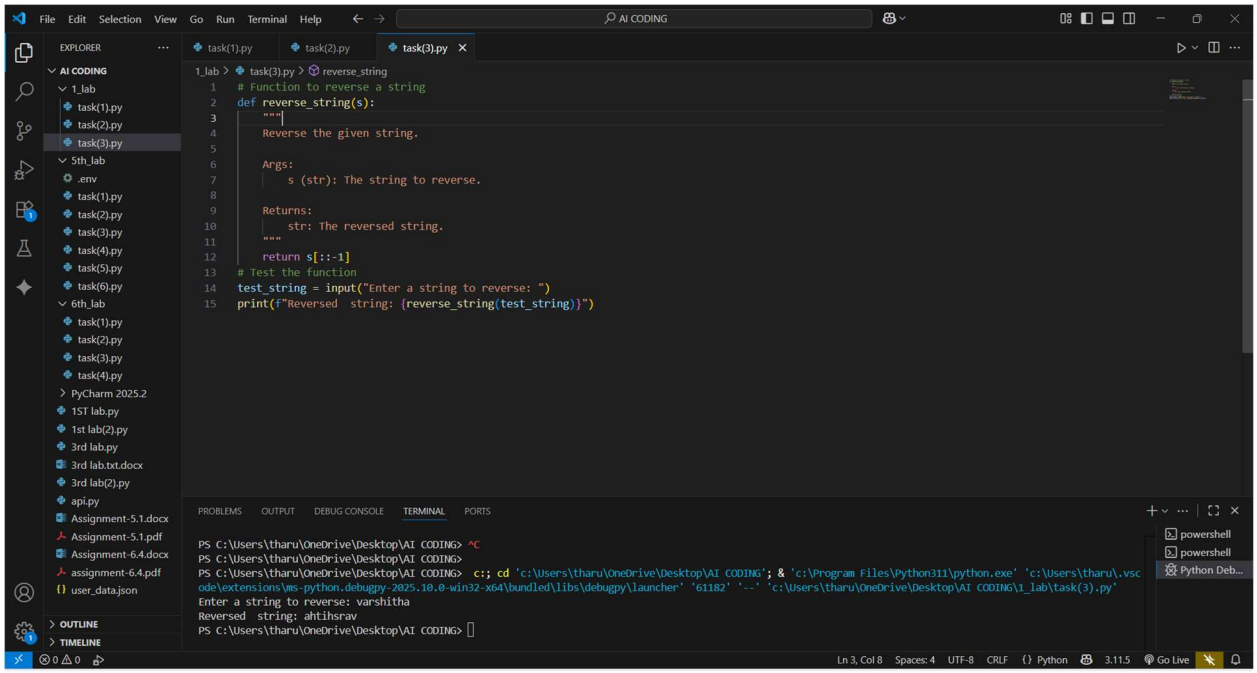
Task 3:

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

function.

Expected Output#3

● Auto-completed reverse function



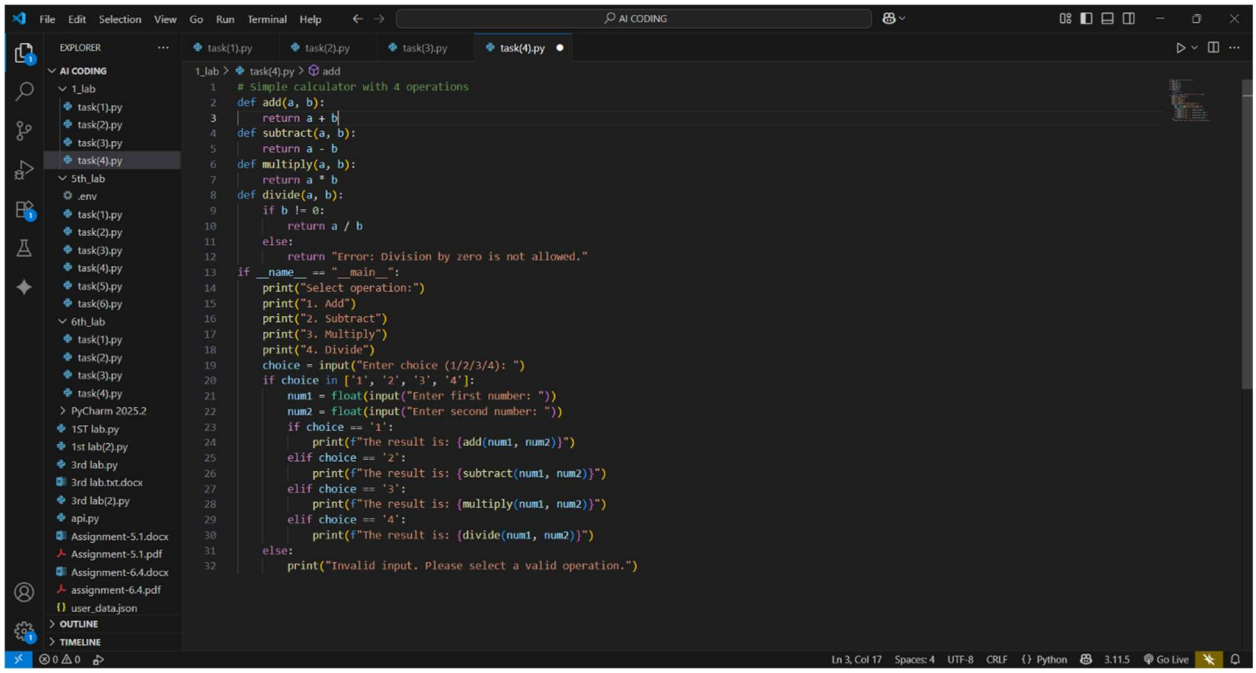
Task 4:

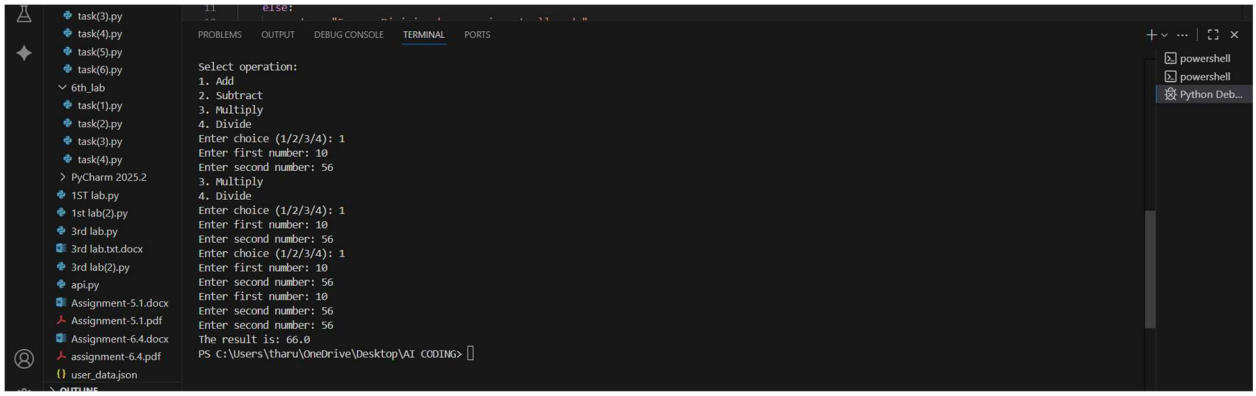
Generate a program that simulates a basic calculator (add, subtract, multiply, divide).

Write the comment: # Simple calculator with 4 operations and let AI complete it.

Expected Output#4

● Fully working calculator with input/output and operator selection logic



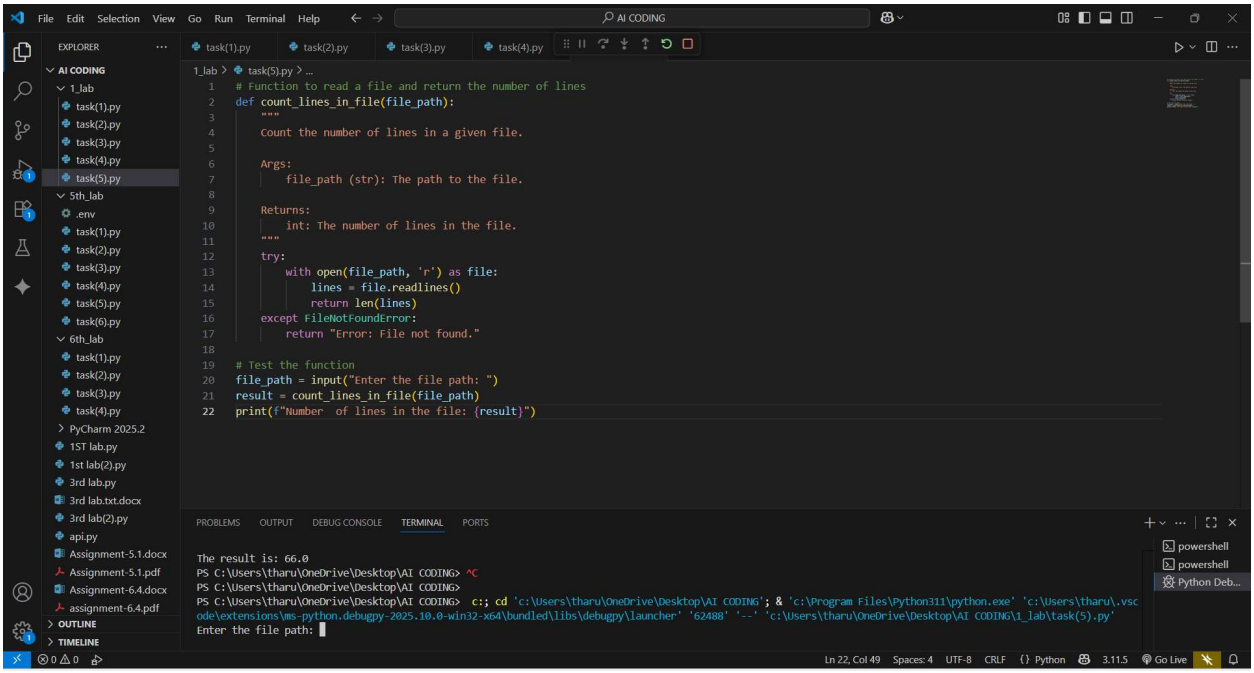


Task 5:

● Use a comment to instruct AI to write a function that reads a file and returns the number of lines.

Expected Output#5

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


File Edit Selection View Go Run Terminal Help
AI CODING
EXPLORER
AI CODING
1_lab
task(1).py
task(2).py
task(3).py
task(4).py
task(5).py
5th_lab
.env
task(1).py
task(2).py
task(3).py
task(4).py
task(5).py
task(6).py
6th_lab
task(1).py
task(2).py
task(3).py
task(4).py
PyCharm 2025.2
1ST lab.py
1st lab(2).py
3rd lab.py
3rd lab.txt.docx
3rd lab(2).py
api.py
Assignment-5.1.docx
Assignment-5.1.pdf
Assignment-6.4.docx
assignment-6.4.pdf
OUTLINE
TIMELINE
task(1).py
task(2).py
task(3).py
task(4).py
1_lab > task(5).py > ...
1 # Function to read a file and return the number of lines
2 def count_lines_in_file(file_path):
3 """
4 Count the number of lines in a given file.
5
6 Args:
7 file_path (str): The path to the file.
8
9 Returns:
10 int: The number of lines in the file.
11 """
12 try:
13 with open(file_path, 'r') as file:
14 lines = file.readlines()
15 return len(lines)
16 except FileNotFoundError:
17 return "Error: File not found."
18
19 # Test the function
20 file_path = input("Enter the file path: ")
21 result = count_lines_in_file(file_path)
22 print(f"Number of lines in the file: {result}")
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
The result is: 66.0
PS C:\Users\tharu\OneDrive\Desktop\AI CODING> ^C
PS C:\Users\tharu\OneDrive\Desktop\AI CODING>
PS C:\Users\tharu\OneDrive\Desktop\AI CODING> c:; cd 'c:\Users\tharu\OneDrive\Desktop\AI CODING'; & 'c:\Program Files\Python311\python.exe' 'c:\Users\tharu\.vscode\extensions\ms-python.debugpy-2025.10.0-win32-x64\bundled\libs\debugpy\launcher' '62488' '--' 'c:\Users\tharu\OneDrive\Desktop\AI CODING\1_lab\task(5).py'
Enter the file path:
powershell
powershell
Python Deb...
Ln 22, Col 49 Spaces: 4 UTF-8 CRLF {} Python 3.11.5 Go Live