SCHOOL OF COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE		DEPARTMENT OF COMPUTER SCIENCE ENGINEERING	
ProgramName:B. Tech		**Assignment Type: Lab**	**AcademicYear:**2025-2026
Course Coordinator Name	Venkataramana Veeramsetty		
Instructor(s)Name	Dr. V. Venkataramana (Co-ordinator) Dr. T. Sampath Kumar Dr. Pramoda Patro Dr. Brij Kishor Tiwari Dr.J.Ravichander Dr. Mohammand Ali Shaik Dr. Anirodh Kumar Mr. S.Naresh Kumar Dr. RAJESH VELPULA Mr. Kundhan Kumar Ms. Ch.Rajitha Mr. M Prakash Mr. B.Raju Intern 1 (Dharma teja) Intern 2 (Sai Prasad) Intern 3 (Sowmya) NS_2 (Mounika)		
CourseCode	24CS002PC215	**CourseTitle**	AI Assisted Coding
Year/Sem	II/I	**Regulation**	R24
Date and Day of Assignment	Week1 - Thursday	**Time(s)**	
Duration	2 Hours	**Applicableto Batches**	24CSBTB01 To 24CSBTB39
AssignmentNumber:1.4(Present assignment number)/**24**(Total number of assignments)			

Q.No.	Question	*ExpectedTime to complete*
1	Lab 1: Environment Setup – GitHub Copilot and VS Code Integration **Lab Objectives:** ● To install and configure GitHub Copilot in Visual Studio Code. ● To explore AI-assisted code generation using GitHub Copilot.	Week1 - Thursday

- To analyze the accuracy and effectiveness of Copilot's code suggestions.
- To understand prompt-based programming using comments and code context

Lab Outcomes (LOs):
After completing this lab, students will be able to:

- Set up GitHub Copilot in VS Code successfully.
- Use inline comments and context to generate code with Copilot.
- Evaluate AI-generated code for correctness and readability.
- Compare code suggestions based on different prompts and programming styles.

Task Description #1
• Install and configure GitHub Copilot in VS Code. Take screenshots of each step.
Expected Output #1
• Successfully install and activate GitHub Copilot in VS Code. Include screenshots showing installation, authentication via GitHub, and an example suggestion from Copilot**.**

Task Description #2
• A function in Python that returns the maximum of three numbers using GitHub Copilot. Use an appropriate comment as a prompt.
Expected Output #2
• Python function that takes three inputs and returns the largest value. Include the code and output.

Task Description #3
• Use GitHub Copilot to create a recursive Python function that calculates the factorial of a number.
Expected Output #3
• Python function for factorial using recursion with input and output examples.

Task Description #4
• Prompt GitHub Copilot to create a class named Student with attributes name, roll_no, and marks. Add a method to display student details.
Expected Output #4
• Python class definition with an initializer and a display method. Include object creation and output.

Task Description #5
• Ask GitHub Copilot to generate a Python function that takes a string as input and returns the frequency of each word.
Expected Output #5
• Python function that returns word frequency using a dictionary. Provide sample input and output.

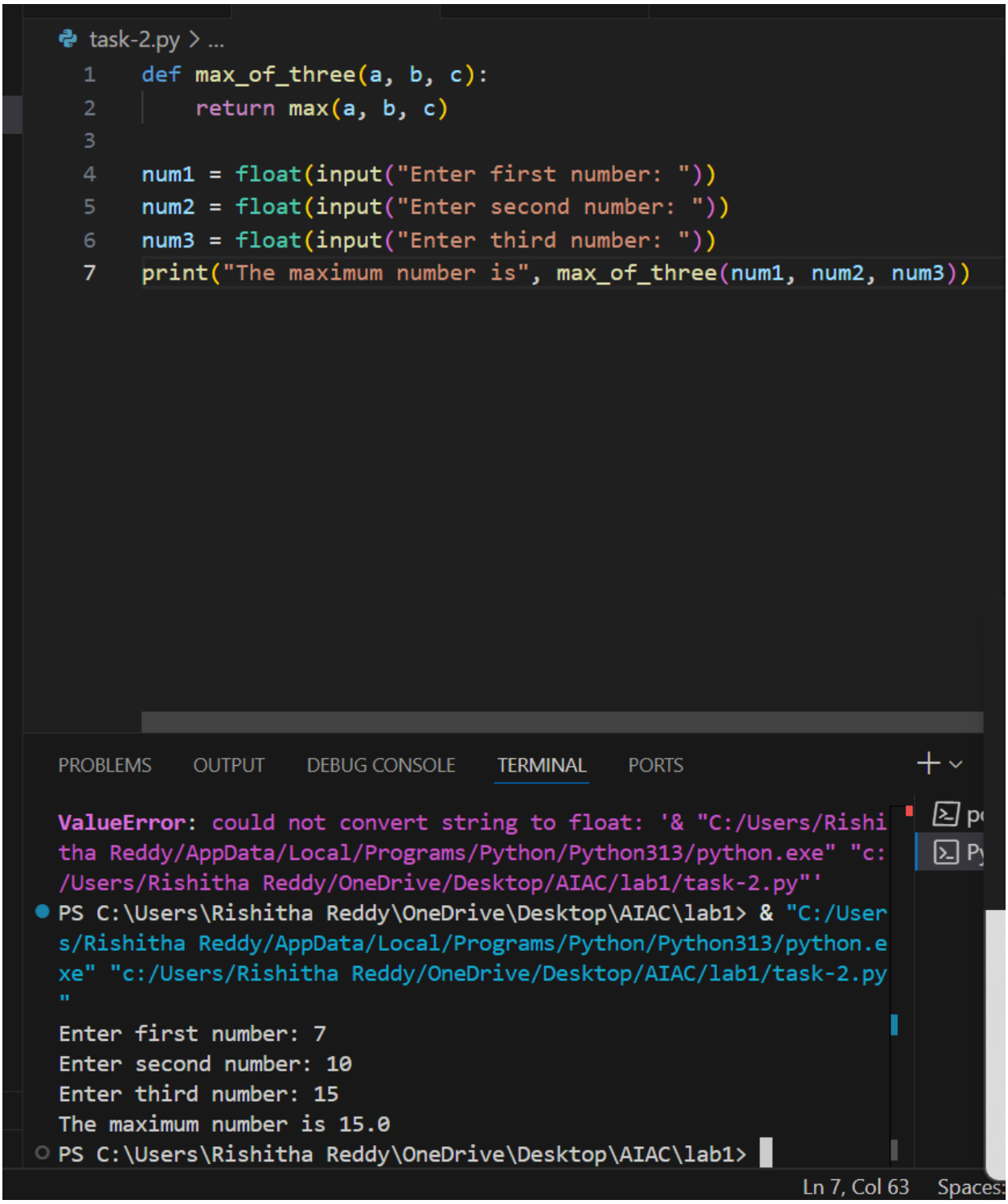
Note: Report should be submitted a word document for all tasks in a single document with prompts, comments & code explanation, and output and if required, screenshots

Evaluation Criteria:

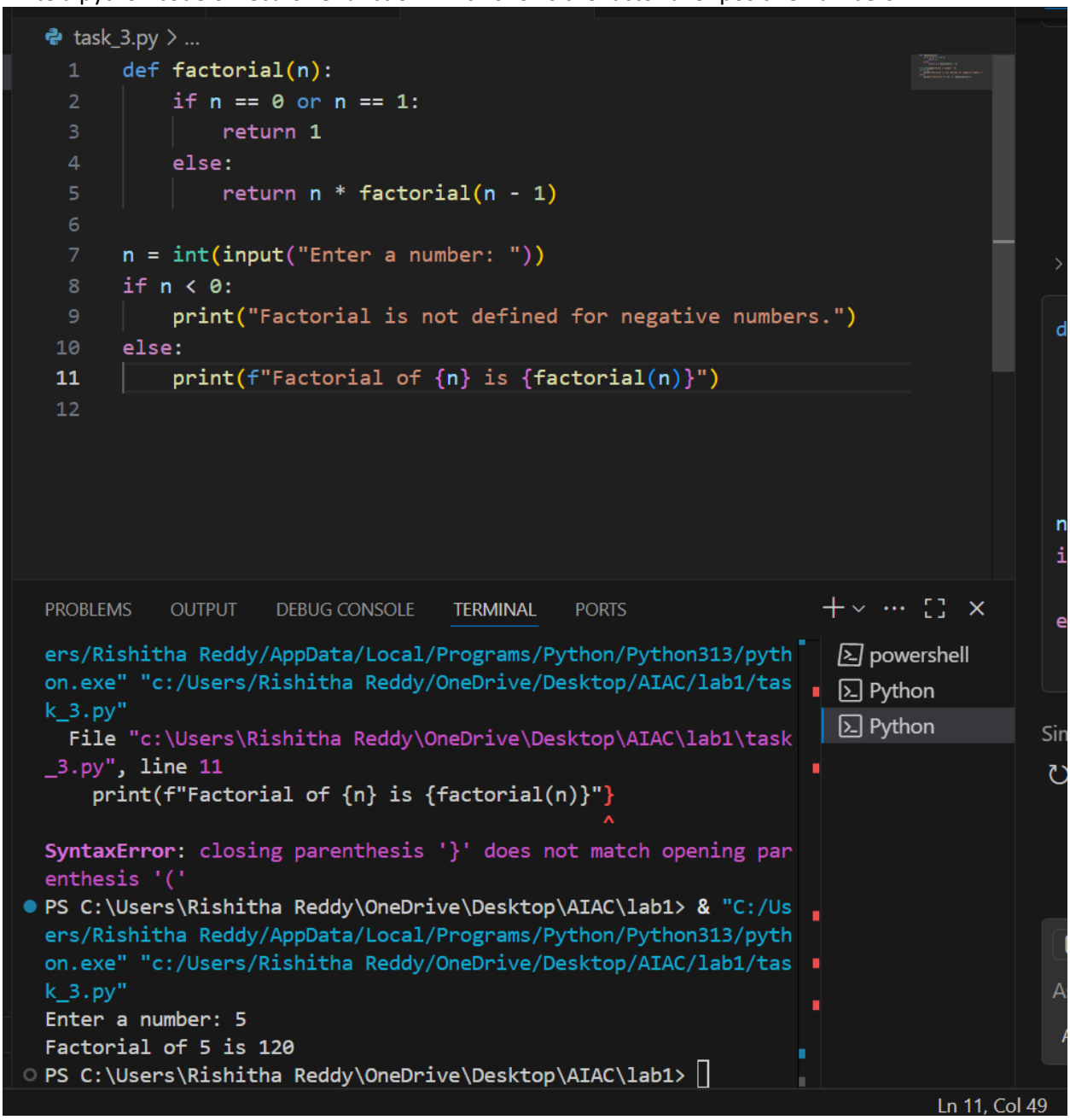
	Criteria	Max Marks		
	Install and configure GitHub Copilot in VS Code (Task #1)	0.5		
	Python function that takes three inputs and returns the largest value (Task #2)	0.5		
	Python function for factorial using recursion (Task #3)	0.5		
	Python class definition with an initializer and a display method (Task #4)	0.5		
	Function that returns word frequency using a dictionary (Task #5)	0.5		
	Total	**2.5 Marks**		

Task2

Prompt: Write a python code that takes input 3 numbers and returns largest number among them.

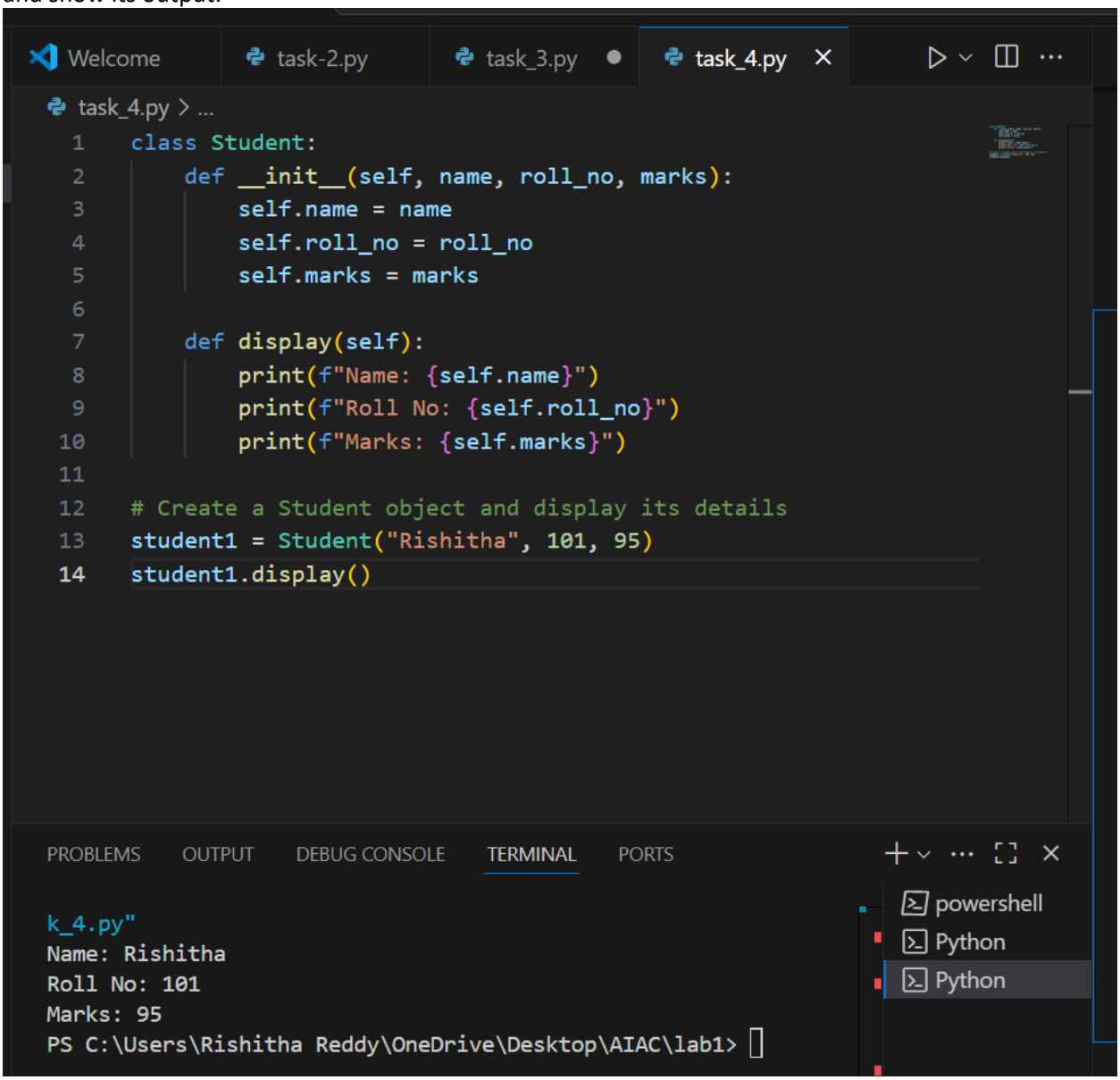

task-2.py > ...
1 def max_of_three(a, b, c):
2 return max(a, b, c)
3
4 num1 = float(input("Enter first number: "))
5 num2 = float(input("Enter second number: "))
6 num3 = float(input("Enter third number: "))
7 print("The maximum number is", max_of_three(num1, num2, num3))
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
ValueError: could not convert string to float: '& "C:/Users/Rishi
tha Reddy/AppData/Local/Programs/Python/Python313/python.exe" "c:
/Users/Rishitha Reddy/OneDrive/Desktop/AIAC/lab1/task-2.py"'
PS C:\Users\Rishitha Reddy\OneDrive\Desktop\AIAC\lab1> & "C:/User
s/Rishitha Reddy/AppData/Local/Programs/Python/Python313/python.e
xe" "c:/Users/Rishitha Reddy/OneDrive/Desktop/AIAC/lab1/task-2.py
"
Enter first number: 7
Enter second number: 10
Enter third number: 15
The maximum number is 15.0
PS C:\Users\Rishitha Reddy\OneDrive\Desktop\AIAC\lab1>
Ln 7, Col 63
Spaces:

Task3
Prompt:
write a python code of recursive function which shows the factorial of positive numbers.



Task4

Prompt: Write a Python code with class named Student with attributes name, roll_no, and marks.Add an __init__ method and a display() method that prints the student's details.Then create a Student object and show its output.



Task5

Prompt: Write a Python function called word_frequency that takes a string input.The function should return the frequency of each word,and return a dictionary {word: count}