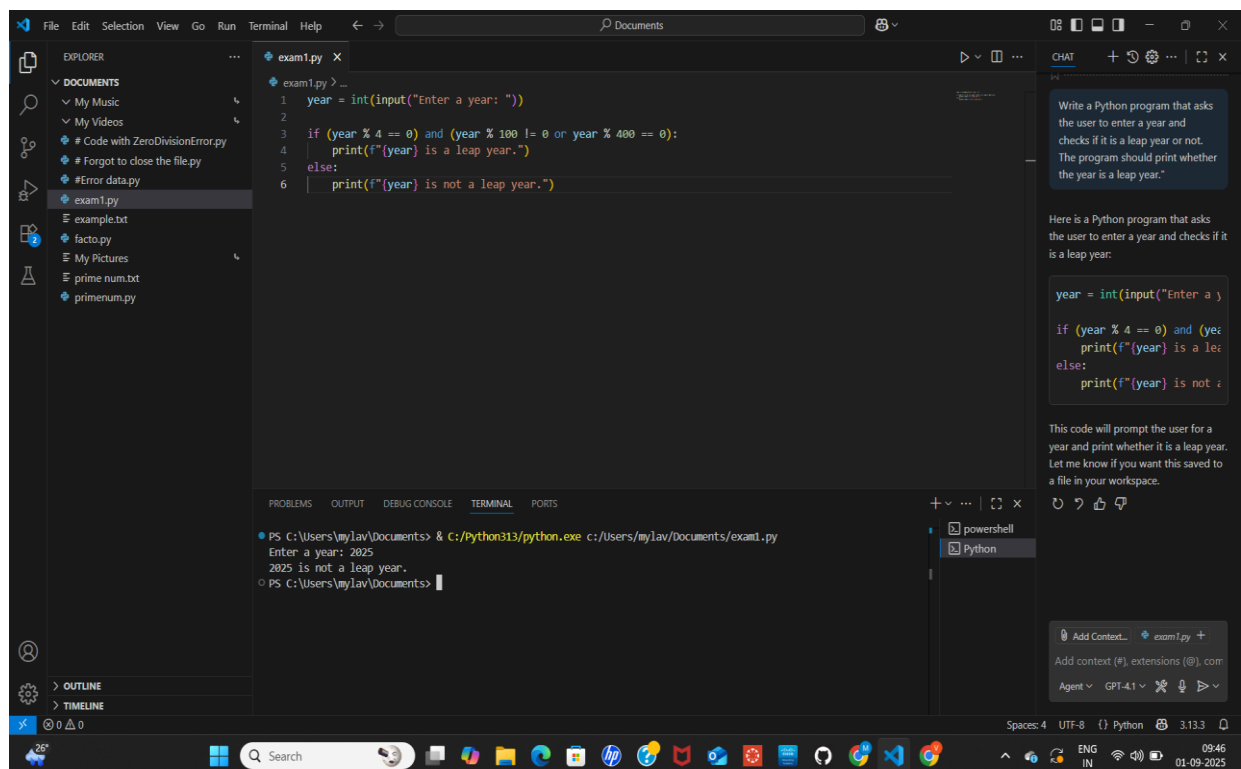
	SR UNIVERSITY Campus Warangal	
	Program: II - B. Tech (CS& AI)	
	Faculty: B.Raju	
	Department: Computer Science and AI	Semester: I
AI Assisted Coding - Lab Test 1		
Instructions: <ol style="list-style-type: none"> 1- Use AI Tools like VScode+Github Copilot and Cursor AI for code generation 2- This Assignment will be evaluated for 15 Marks (10 Marks for Tasks and 5 Marks for viva based on regular lab activities) 3- Students need to submit assignment through canvas before due date 4- Students who are absent for lab will receive 0 Marks 		

Q1. Code Generation with Conditions (5M)

Task: Ask AI to generate a Python program that checks whether a given year is a Leap Year or not.

Requirement: Submit the prompt, code, and sample output.



The screenshot shows the Visual Studio Code interface. The Explorer panel on the left shows a file named `exam1.py` in the `DOCUMENTS` folder. The main editor displays the following Python code:

```
1 year = int(input("Enter a year: "))
2
3 if (year % 4 == 0) and (year % 100 != 0 or year % 400 == 0):
4     print(f"{year} is a leap year.")
5 else:
6     print(f"{year} is not a leap year.")
```

The TERMINAL panel at the bottom shows the execution of the program:

```
PS C:\Users\mylav\Documents> & C:\Python313\python.exe c:/Users/mylav/Documents/exam1.py
Enter a year: 2025
2025 is not a leap year.
PS C:\Users\mylav\Documents>
```

The CHAT panel on the right contains the following prompt and response:

Prompt: Write a Python program that asks the user to enter a year and checks if it is a leap year or not. The program should print whether the year is a leap year.

Response: Here is a Python program that asks the user to enter a year and checks if it is a leap year:

```
year = int(input("Enter a year: "))
if (year % 4 == 0) and (year % 100 != 0 or year % 400 == 0):
    print(f"{year} is a leap year.")
else:
    print(f"{year} is not a leap year.")
```

The response also includes a note: "This code will prompt the user for a year and print whether it is a leap year. Let me know if you want this saved to a file in your workspace."

PROMPT:

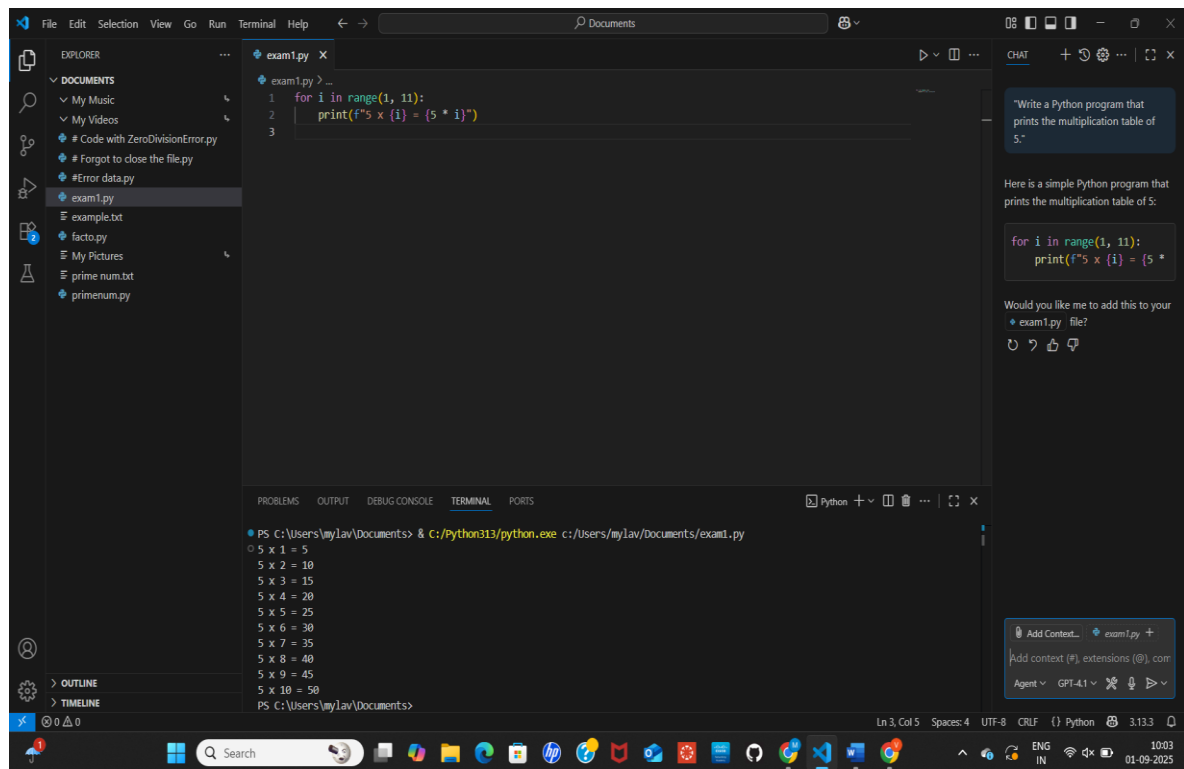
Write a python program that asks the user to enter a year and check if it is a leap year or not. The program should print wheather the year given by user is leap or not

Q2. Multi-Stage AI Prompting (5M)

Task: First, prompt AI to generate a Python program for multiplication table of 5.

Then, re-prompt AI to make it dynamic (take number from user input).

Requirement: Submit both versions and explain how re-prompting improved the solution.



1st prompt:

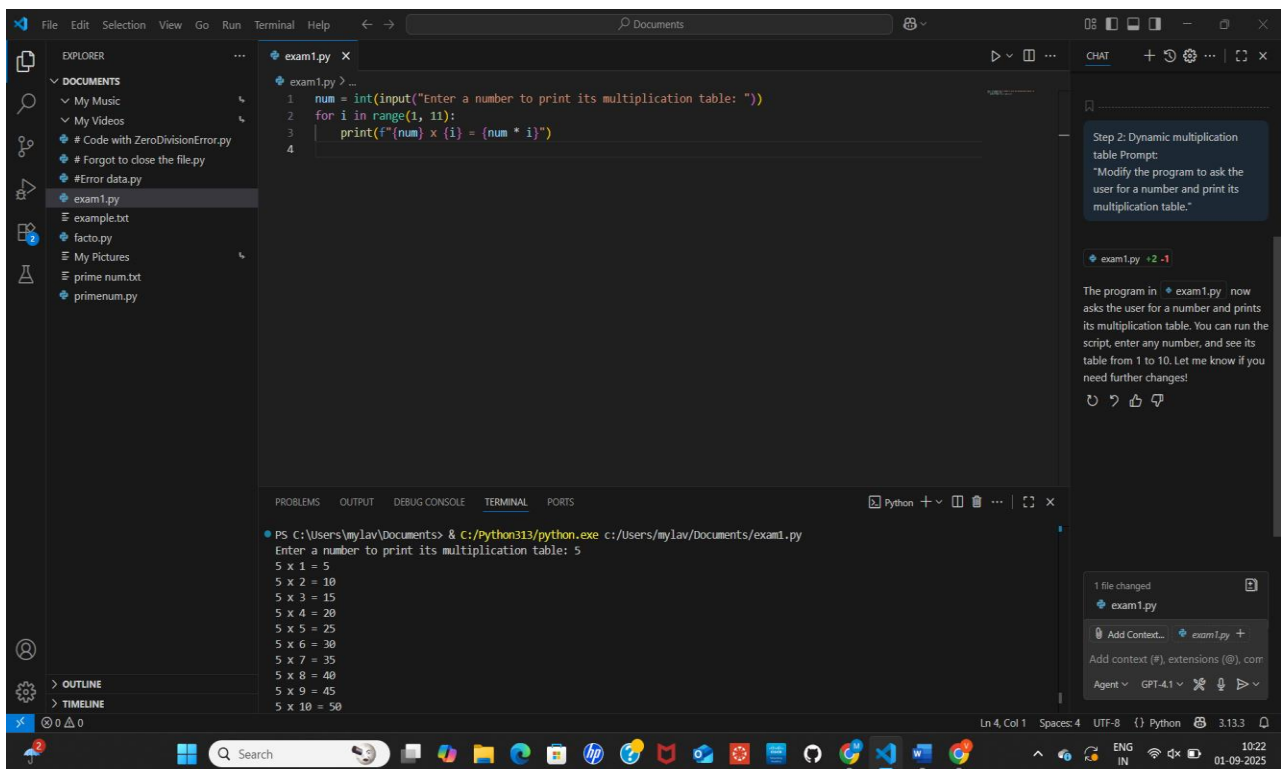
Step 1: Static multiplication table Prompt:

"Write a Python program that prints the multiplication table of 5."

2nd prompt:

Step 2: Dynamic multiplication table Prompt:

"Modify the program to ask the user for a number and print its multiplication table."



EXPLANATION OF RE-PROMPTING:

Re-prompting improved the solution by making the program flexible. The first version only prints the table for 5, while the second version allows the user to choose any number, making it more useful and interactive.