| SCHOOL OF COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE | | DEPARTMENT OF COMPUTER SCIENCE ENGINEERING | |
|---|---|---|---|
| **ProgramName:**B. Tech | | **Assignment Type: Lab** | **AcademicYear:**2025-2026 |
| **CourseCoordinatorName** | Venkataramana Veeramsetty | | |
| **Instructor(s)Name** | Dr. V. Venkataramana (Co-ordinator)<br>Dr. T. Sampath Kumar<br>Dr. Pramoda Patro<br>Dr. Brij Kishor Tiwari<br>Dr.J.Ravichander<br>Dr. Mohammand Ali Shaik<br>Dr. Anirodh Kumar<br>Mr. S.Naresh Kumar<br>Dr. RAJESH VELPULA<br>Mr. Kundhan Kumar<br>Ms. Ch.Rajitha<br>Mr. M Prakash<br>Mr. B.Raju<br>Intern 1 (Dharma teja)<br>Intern 2 (Sai Prasad)<br>Intern 3 (Sowmya)<br>NS_2 ( Mounika) | | |
| **CourseCode** | 24CS002PC215 | **CourseTitle** | AI Assisted Coding |
| **Year/Sem** | II/I | **Regulation** | R24 |
| **Date and Day of Assignment** | Week1 - Tuesday | **Time(s)** | |
| **Duration** | 2 Hours | **Applicableto Batches** | 24CSBTB01 To 24CSBTB39 |
| **AssignmentNumber:1.2**(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<br><br>**Lab Objectives:**<br>• To install and configure GitHub Copilot in Visual Studio Code. | Week1 - wednesday |

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

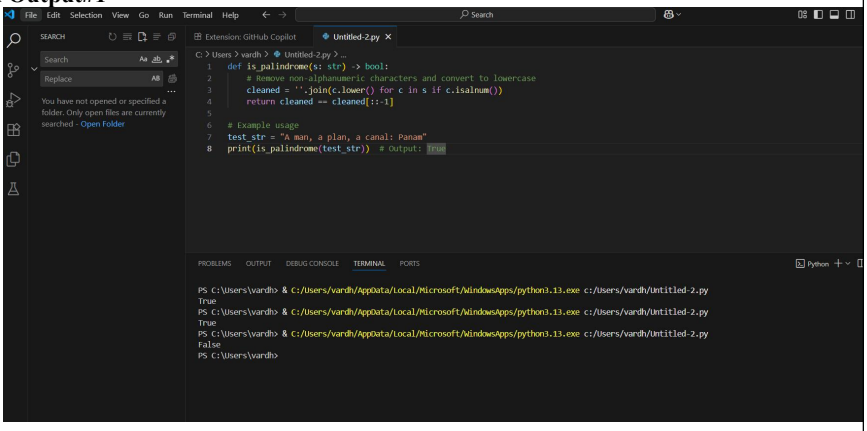
**Lab Outcomes (LOs):**
After completing this lab, students will be able to:

- 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**

- Write a comment: # Function to check if a string is a valid palindrome (ignoring spaces and case) and allow Copilot to complete it.
- **Prompt:**write a python code to check wheather a given string is palindrome or not.

**Expected Output#1**



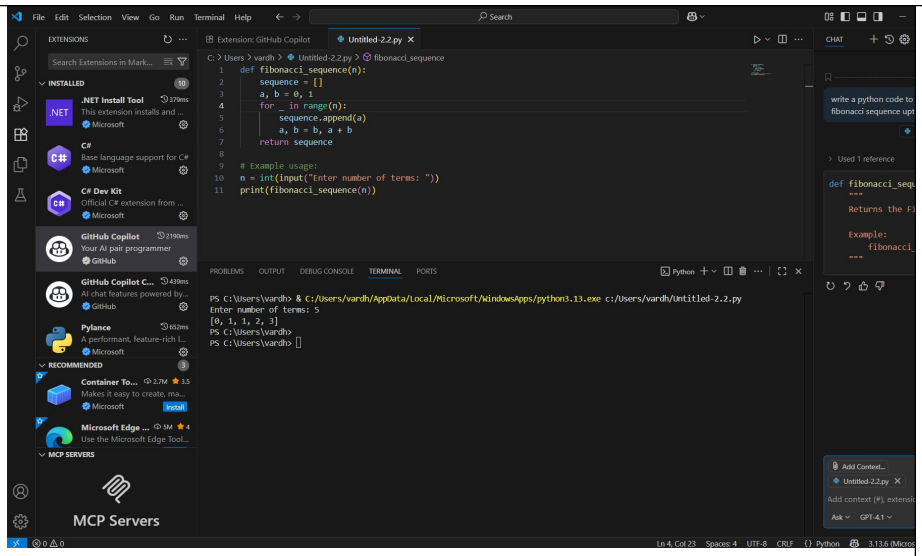

**Task Description#2**

write a code in python language that returns fibonacci series upto n terms with only header and docstring

- Prompt with only a function header and docstring

**Expected Output#2**

**Prompt:**write a python code to find fibonacci sequence upto n terms.

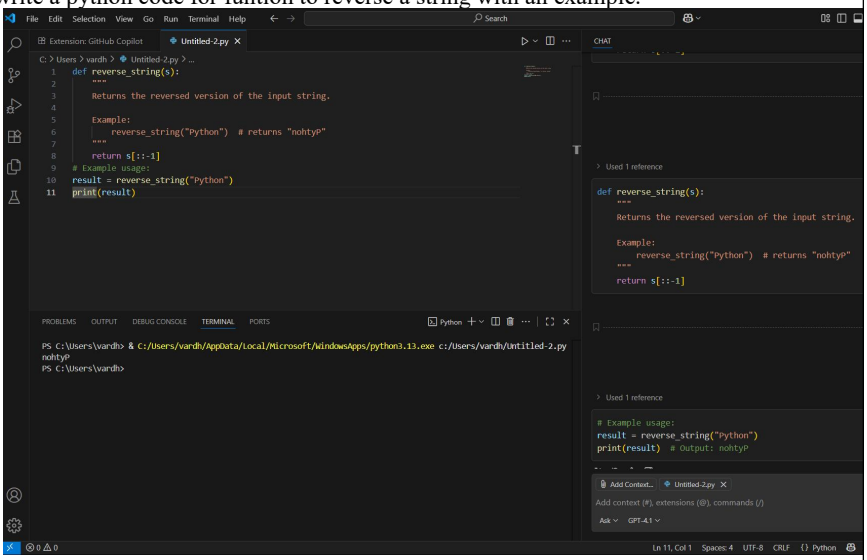



**Task Description#3**

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

**Expected Output#3**

**Prompt:**write a python code for funtion to reverse a string with an example.

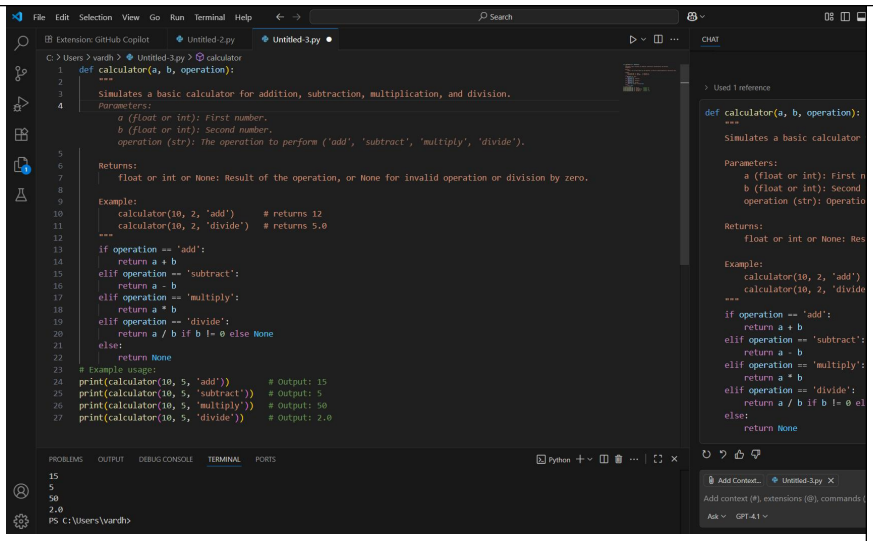
- 


**Task Description#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**

**Prompt:**write a python code that simulates a basic calculator (add, subtract, multiply, divide).

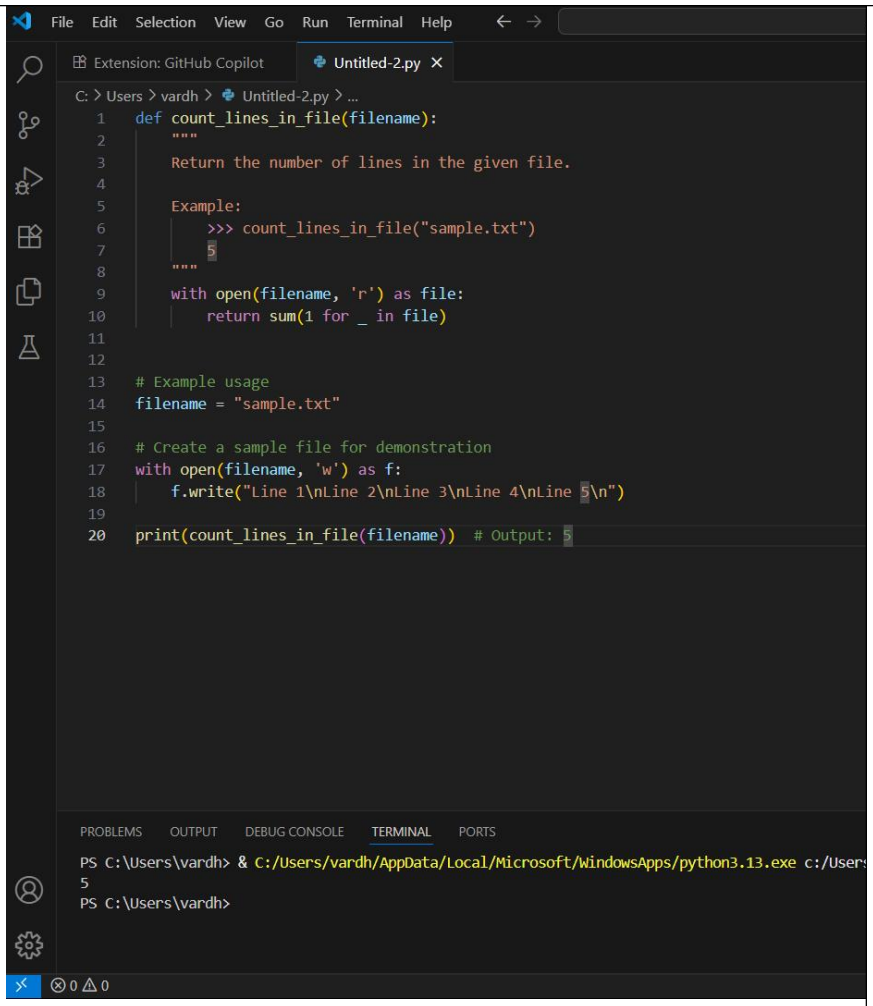
- 


**Task Description#5**

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

**Expected Output#5**

- **Prompt:**write a python code only for a funtion that reads a file and returns the number of lines

- 


**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 |
|---|---|
| Task #1 | 0.5 |
| Task #2 | 0.5 |
| Task #3 | 0.5 |
| Task #4 | 0.5 |
| Task #5 | 0.5 |
| **Total** | **2.5 Marks** |