| SCHOOL OF COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE | | | | DEPARTMENT OF COMPUTER SCIENCE ENGINEERING | |
|--------------------------------------------------------|-------|-----------------------|---------------------------|--------------------------------------------|------------------------|
| ProgramName: <mark>B. Tech</mark> | | | Assignm | ent Type: Lab | AcademicYear:2025-2026 |
| CourseCoordinatorName | | | Venkataramana Veeramsetty | | 1 |
| Instructor(| s)Nam | ne | | | |
| • | | | Dr. V. Venkata | aramana (Co-ordina | ator) |
| | | | Dr. T. Sampath Kumar | | |
| | | | Dr. Pramoda Patro | | |
| | | | Dr. Brij Kisho | r Tiwari | |
| | | | Dr.J.Ravichano | der | |
| | | | Dr. Mohammand Ali Shaik | | |
| | | | Dr. Anirodh K | umar | |
| | | | 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) | | | |
| | | 24CS002DC215 | NS_2 (Moun | | · |
| CourseCode | | 24CS002PC215 | CourseTitle | AI Assisted Codi | ing |
| Year/Sem | | II/I | Regulation | R24 | |
| Date and Day of Assignment | | Week1 - Wednesday | Time(s) | | |
| Duration | | 2 Hours | Applicableto Batches | 24CSBTB01 To 24CSBTB39 | |
| Assignmer | ntNum | | ssignment numbe | r)/ 24 (Total number | r of assignments) |
| Q.No. | Que | Expected | | | |
| | | | | | me |
| | | | | | to |
| | | | | | complete |
| | Lab | Week1 - | | | |
| | | | | | |

- 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

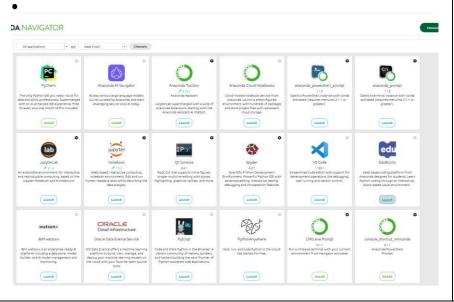
Lab Outcomes (LOs):

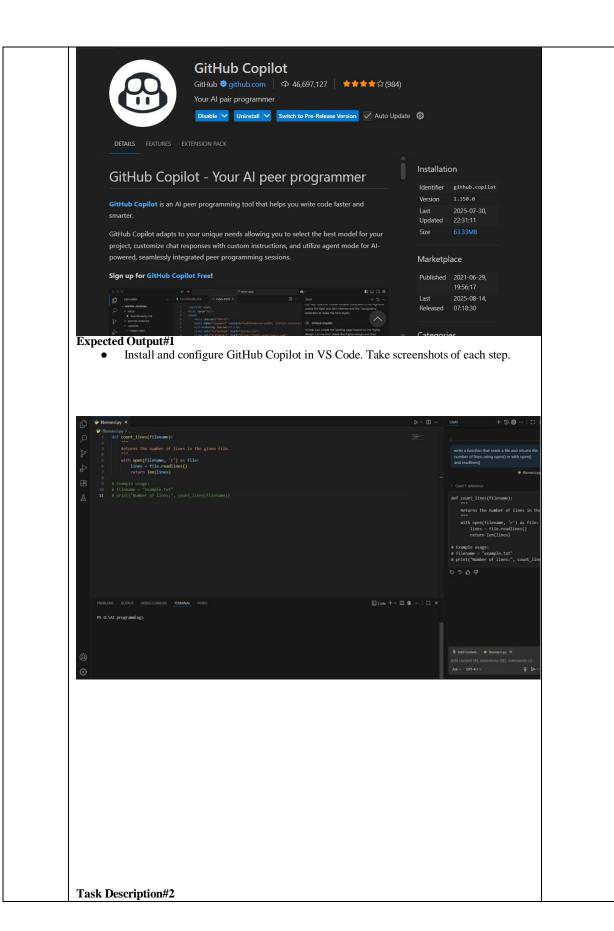
After completing this lab, students will be able to:

- 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.

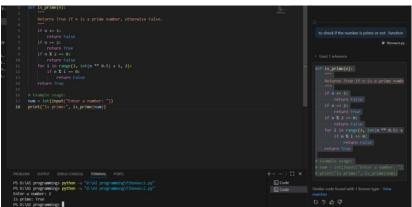
Task Description#1

• Install and configure GitHub Copilot in VS Code. Take screenshots of each step.





• Use Copilot to generate a is_prime() Python function.

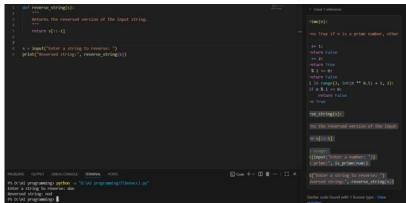


Expected Output#2

• Function to check primality with correct logic.

Task Description#3

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



Expected Output#3

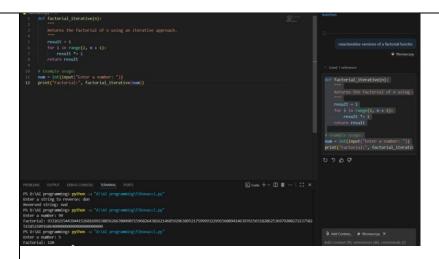
• Auto-completed reverse function

Task Description#4

• Generate both recursive and iterative versions of a factorial function using comments..

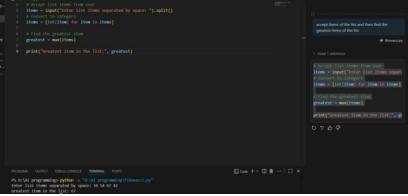
Expected Output#4

• Two working factorial implementations



Task Description#5

• Use Copilot to find the largest number in a list. Assess code quality and efficiency.



Expected Output#5

• A valid function with your review

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 |
|---------------------------------------|-----------|
| Successful Setup of Copilot (Task #1) | 0.5 |
| is_prime() Python function (Task #2) | 0.5 |
| Reverse a string function (Task #3) | 0.5 |
| Factorial Function (Task #4) | 0.5 |
| Find the largest number (Task #5) | 0.5 |
| Total | 2.5 Marks |