SCHOOL OF COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE			DEPARTMENT OF COMPUTER SCIENCE ENGINEERING		
NAME:A.MANASA ENROLL NO.:2403A53043 BATCH NO.:24BTCAICYB02 PROGRAM:B.TECH		Assignment Type: Lab Academic Year:2025-		Academic Year:2025-2026	
Course Coordinator Name		Venkataramana Veeramsetty			
Instructor(s)Name		 Dr. Mohammed Ali Shaik Dr. T Sampath Kumar Mr. S Naresh Kumar Dr. V. Rajesh Dr. Brij Kishore Dr Pramoda Patro Dr. Venkataramana Dr. Ravi Chander Dr. Jagjeeth Singh 			
Course Code	24CS002PC215	Course Title	AI Assisted Codi	ng	
/ear/Sem	II/I	Regulation	R24		
Date and Day of Assignment	06-08-2025	Time(s)			
Duration	2 Hours	Applicable to Batches			
AssignmentNun	nber: <mark>6.5</mark> (Present a	assignment numb	er)/ 24 (Total numbe	er of assignments)	

Q.No.	Question	ExpectedTime
		to complete
	Lab 6: AI-Based Code Completion: Working with suggestions for classes, loops, conditionals	
	Lab Assignment 1: Intelligent Code Completion for Object-Oriented Programming	
1	Objective: To explore AI-powered code assistants for writing Python classes, constructors, and methods through intelligent suggestions.	
	Suppose that you are hired as an intern at a tech company that develops inventory management systems. Your manager asks you to create a Product class and a Warehouse class with some basic methods. You have decided to use AI-powered code suggestions to help speed up development and reduce syntax errors.	
	Tasks to be completed are as below 1. Setup AI Coding Tool:	
	• Install and configure GitHub Copilot or Kite with VS Code or JetBrains IDE.	
	Enable real-time code suggestions.	
	2. Class Design Using AI Assistance:	
	 Begin defining a Product class with attributes: name, price, quantity. 	
	Use the AI suggestion feature to automatically complete theinit() method.	

• Add a method calculate_value() to return price * quantity.

3. Create Another Class:

- Define a Warehouse class with a list of Product objects.
- Use code completion to help implement:
 - O A method to add a product.
 - O A method to display the most valuable product.

4. Reflection:

- Identify how much of the code was completed by AI and what manual edits were needed.
- Comment on the relevance and accuracy of AI suggestions.

Requirements:

 VS Code with Github Copilot or Cursor API and/or Google Colab with Gemini

Deliverables:

- Python script with both classes and comments on AI-generated suggestions.
- Short report (1 page) summarizing your experience with AI code completion.

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