SCHOOL OF COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE			DEPARTMENT OF COMPUTER SCIENCE ENGINEERING	
ProgramName:B. Tech		SET-C		AcademicYear:2025-2026
Roll No.				
Instructor(s)Name		 Dr. Venkataramana Dr. Ch. Sridhar Mr. Kundan Kumar 		
CourseCode	24CS002PC215	CourseTitle	AI Assisted Codi	ng
Year/Sem	II/I	Regulation	R24	
Date and Day of Assignment	22.08.2025	Time(s)	01.00PM To 03.0	00PM
Duration	2 Hours	Applicableto Batches	24BTCAIAIB09,	, 24BTCAIAIB10

Lab Test :1(Present test number)/4(Total number of tests)

Q.No.	Question	ExpectedTime
		to complete
	Task Description#1 • Write python program for a SRU_Student class with attributes like Name, Roll No, and Department. And, add a method Student_Data that helps to store details of student as a text document. Use VS Code with GitHub Copilot Prompt: Generate python program for a SRU_Student class with attributes like Name, Roll No, and Department, add a method Student_Data that helps to store details of student as a text document Code: taskl.py × ✓ Welcome taskl.py > class SRU_Student: definit(self, name, roll_no, department):	·
1	<pre>print("• SRU_Student class initialization") self.name = name self.roll_no = roll_no self.department = department def Student_Data(self, filename): print("• Student_Data") with open(filename, 'w') as file: file.write(f"Name: {self.name}\n") file.write(f"Noll No: {self.roll_no}\n") file.write(f"Tepartment: {self.department}\n") print(f"• Text Document having student data → '{filename}' created successfully") student = SRU_Student("Pranith reddy", "52269", "Computer Science") student.Student_Data("student_data.txt")</pre>	22.08.2025 03.00PM

Output: PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS +-> PS C:\Users\pc\\OneDrive\Documents\AIAC\lab test> & C:\Users\pc\\AppData\Local\\Programs\\Python\\Python313\\python.exe "c:\Users\pc\\OneDrive\Documents\\IAC\lab test\" • SRU_Student_class initialization • Student_Data • Text Document having student data + 'student_data.txt' created successfully PS C:\Users\pc\\OneDrive\Documents\AIAC\lab test> |

- Defines a class <u>SRU_Student</u> with attributes for name, roll number, and department.
- Initializes these attributes when a new student object is created and prints a message.
- Provides a method <u>Student Data</u> that writes the student's details to a text file and prints status messages.
- Creates an instance of the class with sample data and calls the method to save the details in a file.

Expected Output#1

- SRU_Student class initialization
- Student Data
- Text Document having student data

Task Description#2

• Write a python function to return sum of even and odd numbers from the given list

Prompt:

A python function to return sum of even and odd numbers from the given list of sample numbers 1,2,3,4,5,6

Code:

```
task2.py
task2.py > 🔂 sum_even_odd
       def sum_even_odd(numbers):
  2
           even_sum = 0
           odd_sum = 0
           for value in numbers:
               if value % 2 == 0:
                   even_sum += value
                   odd sum += value
           return even_sum, odd_sum
      if __name__ == "__main__":
    sample_numbers = [1, 2, 3, 4, 5, 6]
          even_total, odd_total = sum_even_odd(sample_numbers)
         print(f"Input: {sample_numbers}")
          print(f"Sum of even numbers: {even_total}")
          print(f"Sum of odd numbers: {odd_total}")
```

Output:

```
Problems Output Debug Console Terminal Ports \[ \sum \text{Python} + \sum \subseteq \subseteq \text{\text{Problems}} \]

Python + \subseteq \subseteq \text{\text{\text{\text{Propnans/Python/Python313/python.exe}}} \]

Problems Output Debug Console \text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\tex
```

Explanation:

- Function: sum_even_odd(numbers)
- Input: a list of integers, numbers.
- Output: a tuple (even sum, odd sum) where:
- even sum = sum of all even numbers in the list.
- odd_sum = sum of all odd numbers in the list.
- How it works:
- Initializes even sum and odd sum to 0.
- Loops through each value in numbers.
- If value % 2 == 0, adds it to even_sum, else adds it to odd_sum.
- Returns the two sums.
- Runnable example (already in the file):
- When you run python task2.py, it uses sample_numbers = [1, 2, 3, 4, 5, 6],
- Calls sum_even_odd(sample_numbers),
- Prints
- Sum of even numbers: 12
- Sum of odd numbers: 9
- Notes:
- Empty list \rightarrow returns (0, 0).
- Works with negative integers too.
- Ensure the list contains integers to avoid errors.

Expected Output#2

- Function
- Output execution

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

Evaluation Criteria:

Criteria	Max Marks
Factorial Function (Task#1)	5
Sorting Function (Task#2)	5
Viva	5
Total	15 Marks