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SCHOOL OF COMPUTER SCIENCE AND ARTIFICIAL INTELLIGENCE			**DEPAR**
Program Name: B. Tech			**Assignment Type: Lab**
Course Coordinator Name			Dr. Rishabh Mittal
Instructor(s) Name			Mr. S Naresh Kumar Ms. B. Swathi Dr. Sasanko Shekhar Gantaya Mr. Md Sallauddin Dr. Mathivanan Mr. Y Srikanth Ms. N Shilpa Dr. Rishabh Mittal (Coordinat Dr. R. Prashant Kumar Mr. Ankushavali MD Mr. B Viswanath Ms. Sujitha Reddy Ms. A. Anitha Ms. M.Madhuri Ms. Katherashala Swetha Ms. Velpula sumalatha Mr. Bingi Raju
CourseCode	23CS002PC304		**Course Title** AI Assisted
Year/Sem	III/II		**Regulation** R23
Date and Day of Assignment	**Week1 – Wednesday**		**Time(s)** 23CSBTB0
Duration	2 Hours		**Applicable to Batches** All batche
		Assignment Number:1.3(Present assignment number)/**24**(Total n	

Q.No.		**Question**
1		Lab 2: Exploring Additional AI Coding Tools beyond C and Cursor AI **Lab Objectives:**

- To explore and evaluate the functionality of C assisted coding within Google Colab.
- To understand and use Cursor AI for code ger and refactoring.
- To compare outputs and usability between G and Cursor AI.
- To perform code optimization and document

Lab Outcomes (LOs):

After completing this lab, students will be able to:

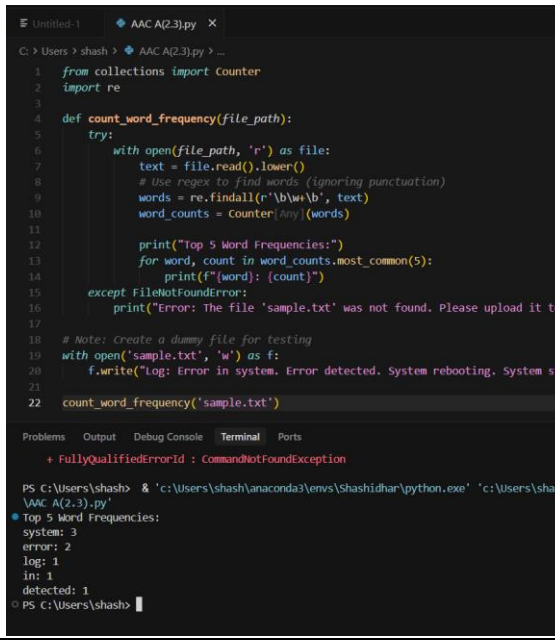
- Generate Python code using Google Gemini in
- Analyze the effectiveness of code explanations Gemini.
- Set up and use Cursor AI for AI-powered codin
- Evaluate and refactor code using Cursor AI fea
- Compare AI tool behavior and code quality acr

Task 1: Word Frequency from Text File

- **Scenario:**
  You are analyzing log files for keyword frequency.

- **Task:**
  Use Gemini to generate Python code that reads a t frequency, then explains the code.

- **Expected Output:**
  - Working code
  - Explanation
  - Screenshot

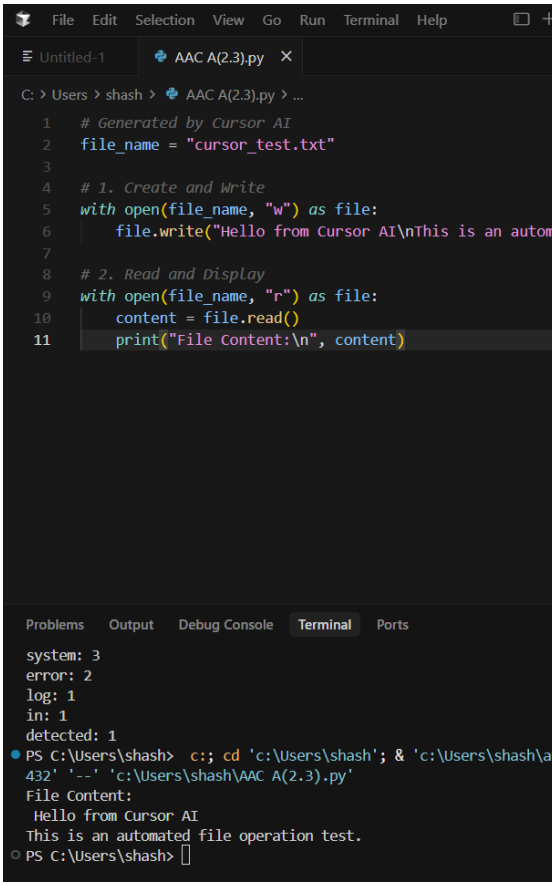


Task 2: File Operations Using Cursor AI

❖ **Scenario:**
You are automating basic file operations.

❖ **Task:**
Use Cursor AI to generate a program that:
- ➢ Creates a text file
- ➢ Writes sample text
- ➢ Reads and displays the content

❖ **Expected Output:**
- ➢ Functional code
- ➢ Cursor AI screenshots



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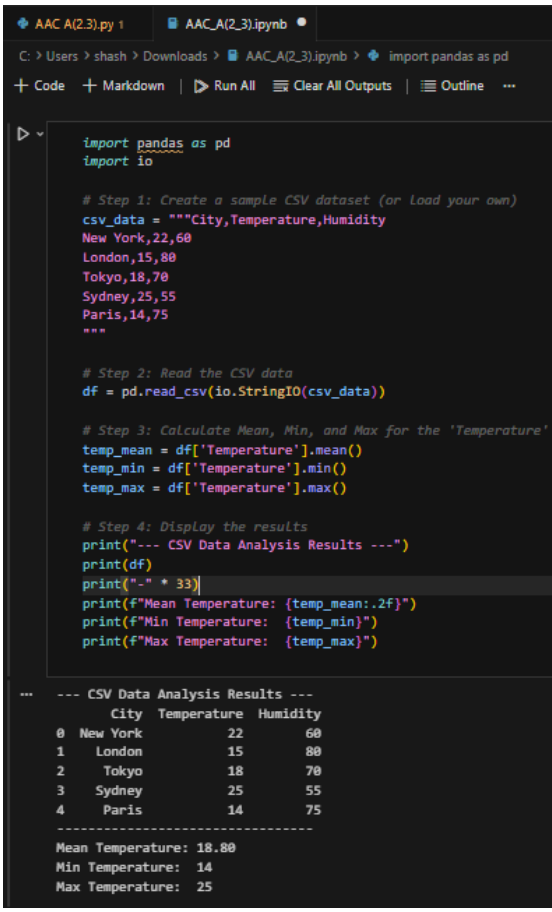
Task 3: CSV Data Analysis

❖ **Scenario:**
You are processing structured data from a CSV file

❖ **Task:**
Use Gemini in Colab to read a CSV file and calculat

❖ **Expected Output:**

- Correct output
- Screenshot



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Task 4: Sorting Lists – Manual vs Built-in

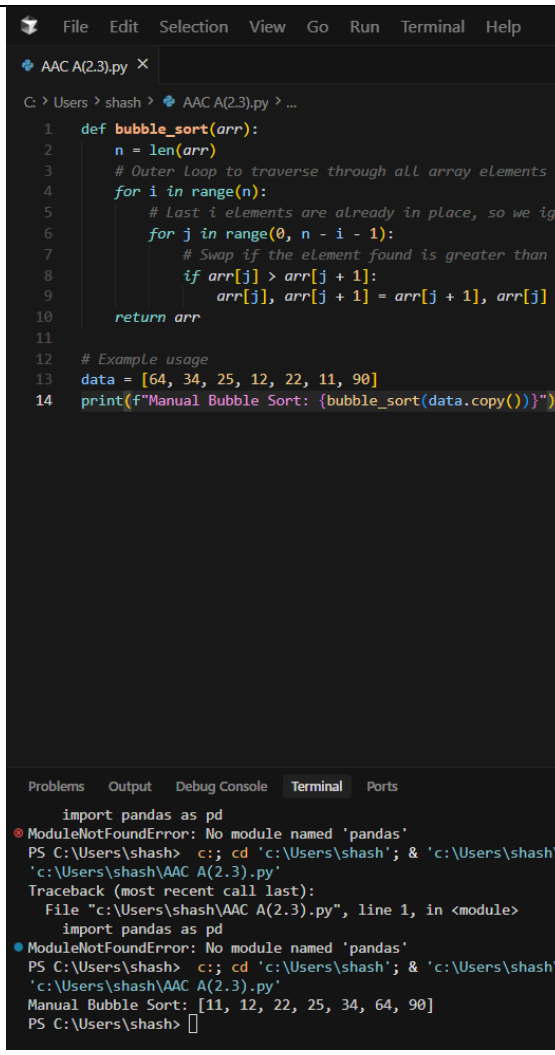
❖ **Scenario:**
You are reviewing algorithm choices for efficiency.

❖ **Task:**
Use **Gemini** to generate:

- Bubble sort
- Python's built-in sort()
- Compare both implementations.

❖ **Expected Output:**

- Two versions of code
- Short comparison



Note: Report should be submitted as a word docume
single document with prompts, comments & code ex
and if required, screenshots.