AI Assisted Coding LAB ASS-5.4

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BATCH:14

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Task Description #1:

• Prompt GitHub Copilot to generate a Python script that collects user data (e.g., name, age, email). Then, ask Copilot to add comments on how to anonymize or protect this data.

PROMPT:

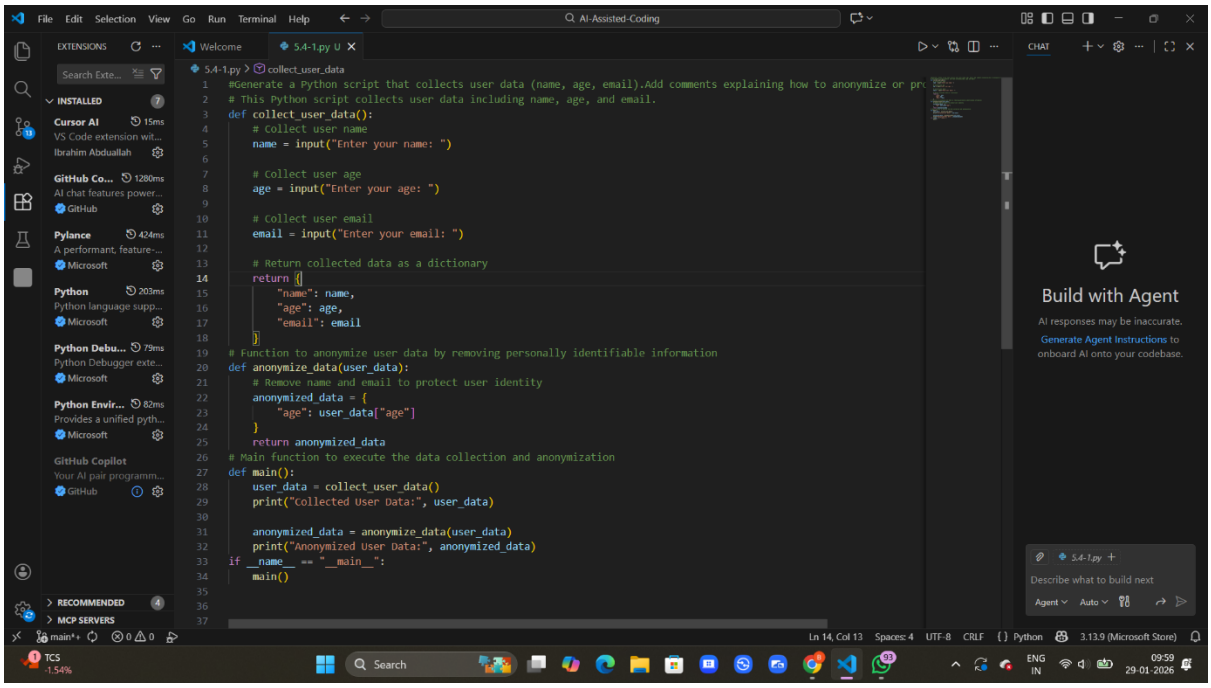
Generate a Python script that collects user data such as name, age, and email.

Add inline comments explaining how to protect or anonymize this data,

such as hashing email addresses, avoiding plain-text storage,

and following basic privacy best practices.

CODE AND INPUT



OUTPUT:

Task Description #2:

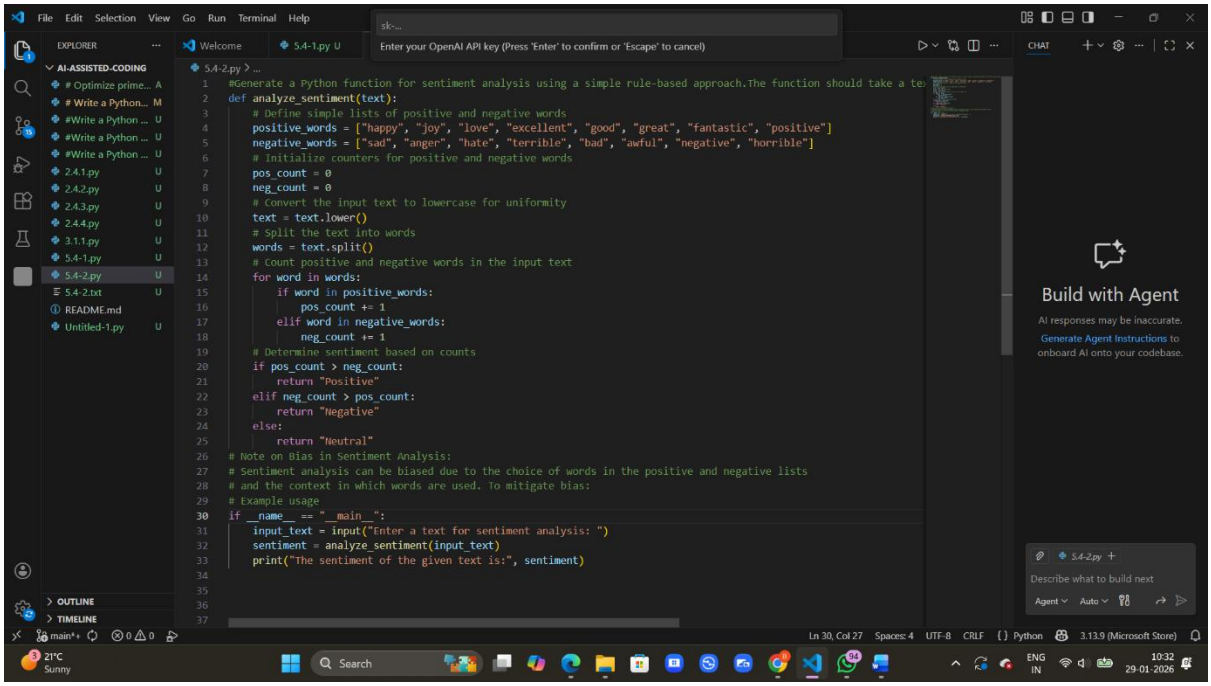
• Ask Copilot to generate a Python function for sentiment analysis. Then prompt Copilot to identify and handle potential biases in the data

PROMPT: **# Generate a Python function for sentiment analysis.**

 # Add comments or code to identify and reduce potential biases in the data,

 # such as removing offensive terms, balancing positive and negative samples,

 # and avoiding biased language in predictions.



OUTPUT:

```
Enter text to analyze (or 'quit' to exit): good

Text: "good"
Sentiment: POSITIVE
Score: 1.0 (range: -1.0 to 1.0)
Positive words: 1
Negative words: 0
Confidence: medium
------------------------------------------------------------

Enter text to analyze (or 'quit' to exit):
```

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL    PORTS
------------------------------------------------------------

Enter text to analyze (or 'quit' to exit): bad

Text: "bad"
Sentiment: NEGATIVE
Score: -1.0 (range: -1.0 to 1.0)
Positive words: 0
Negative words: 1
Confidence: medium
------------------------------------------------------------

Enter text to analyze (or 'quit' to exit):
```

Task Description #3:

• Use Copilot to write a Python program that recommends products based on user history. Ask it to follow ethical guidelines like transparency and fairness.

PROMPT:

 # Generate a Python program that recommends products based on user purchase history.

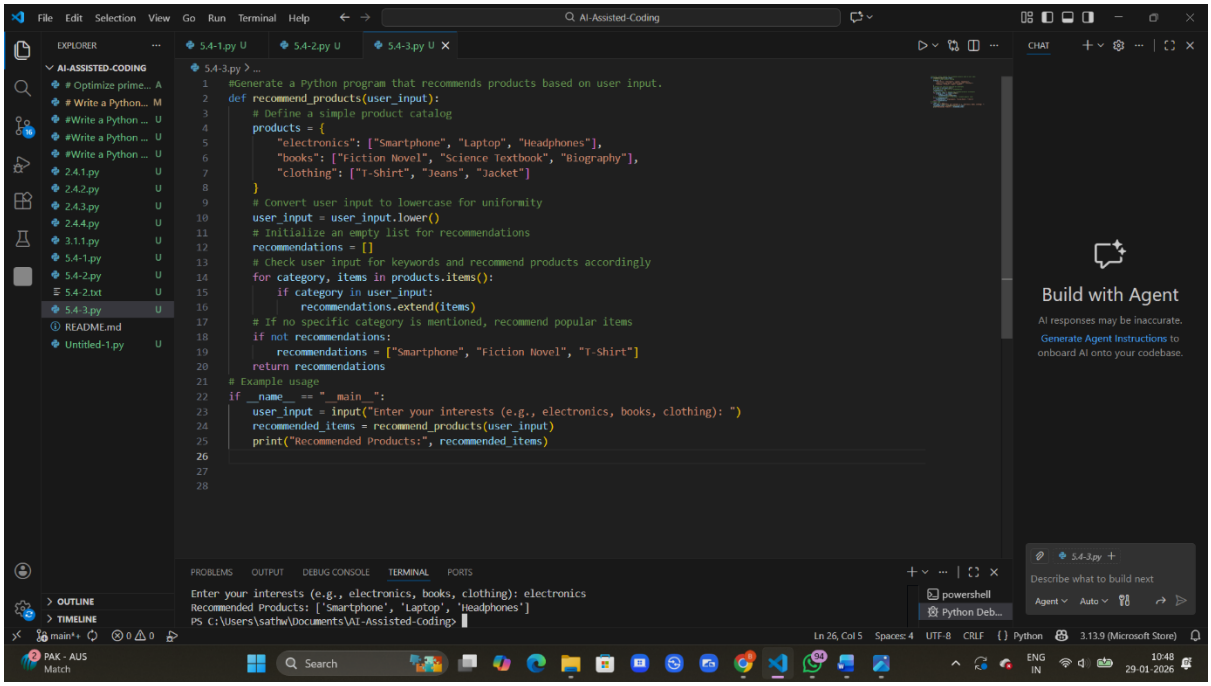
 # Follow ethical AI guidelines such as transparency, fairness, and user control.

 # Add comments explaining how recommendations are generated,

 # Avoid favouritism toward only popular products,

 # and allow users to give feedback or opt out of recommendations.

CODE AND INPUT:



OUTPUT:

Task Description #4:

• Prompt Copilot to generate logging functionality in a Python web application. Then, ask it to ensure the logs do not record sensitive information.

PROMPT:

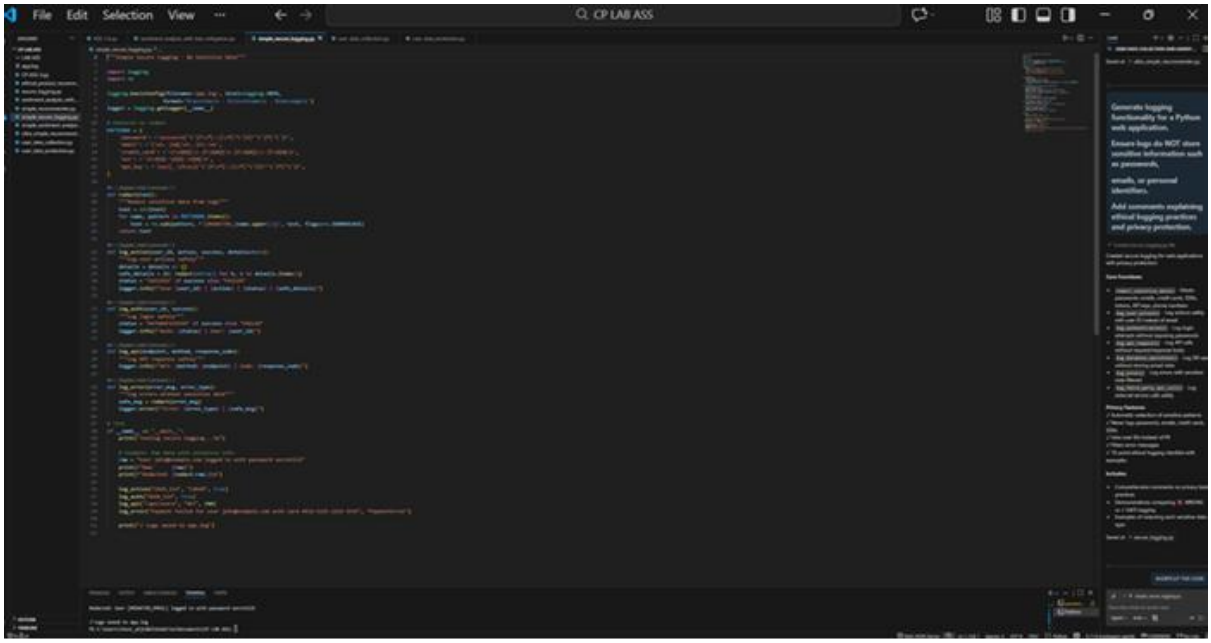
 # Generate logging functionality for a Python web application.

 # Ensure logs do NOT store sensitive information such as passwords,

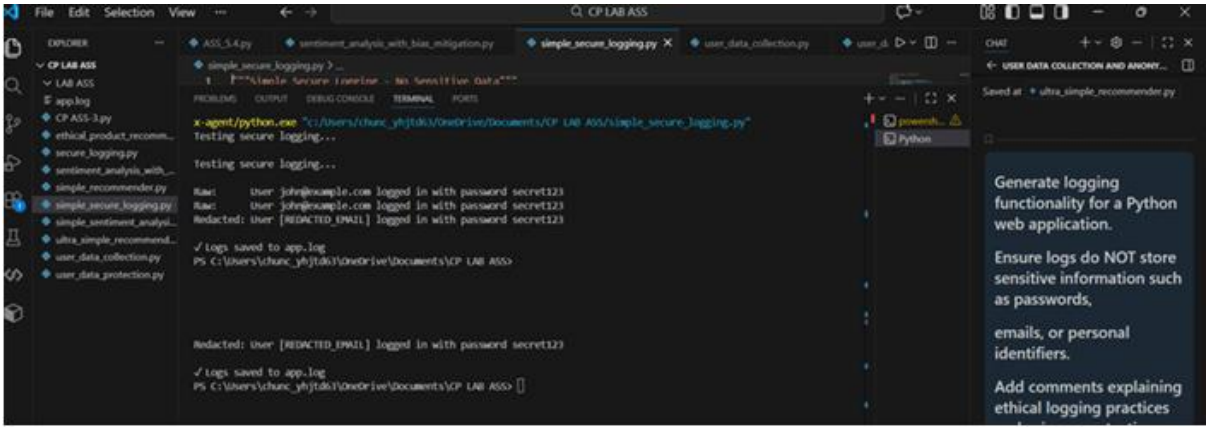
 # emails, or personal identifiers.

 # Add comments explaining ethical logging practices and privacy protection.

CODE AND INPUT:



OUTPUT:



Task Description #5:

• Ask Copilot to generate a machine learning model. Then, prompt it to add documentation on how to use the model responsibly (e.g., explainability, accuracy limits).

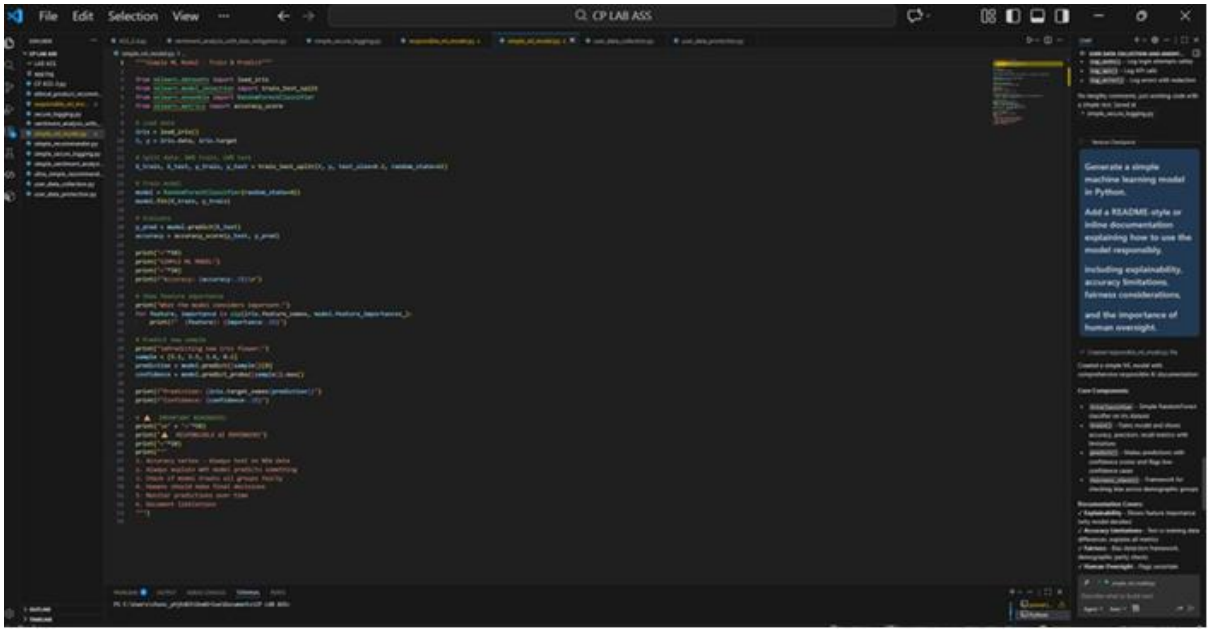
PROMPT: # Generate a simple machine learning model in Python.

 # Add a README-style or inline documentation explaining how to use the model responsibly,

 # including explainability, accuracy limitations, fairness considerations,

 # and the importance of human oversight.

CODE AND INPUT:



OUTPUT: