ASSIGNMENT 5.4

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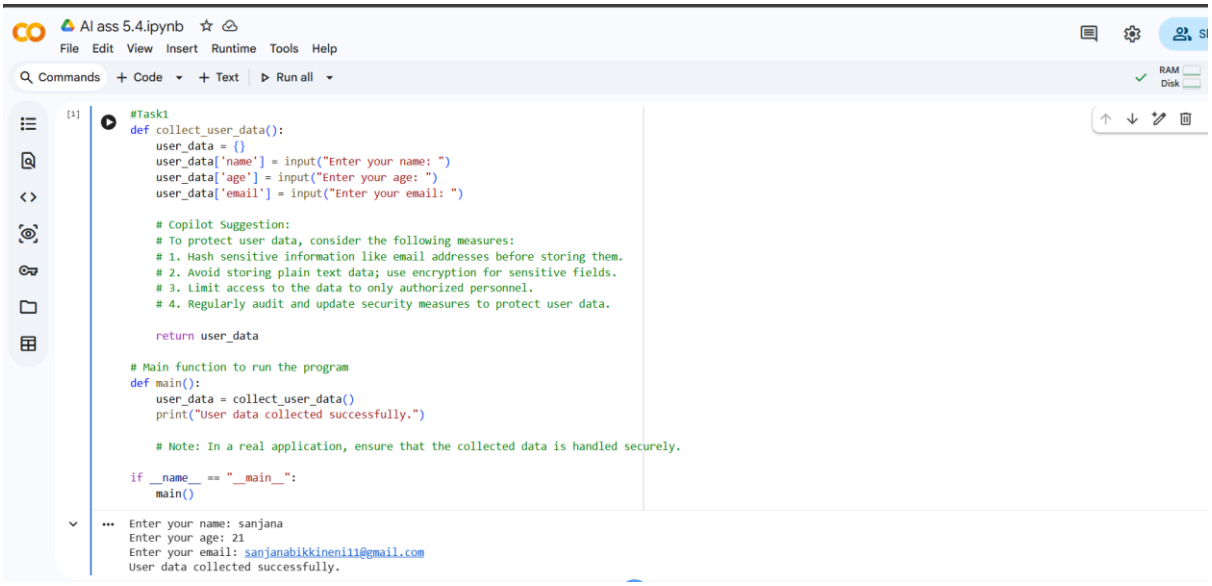
Batch:43

Task 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.

Expected Output #1:

A script with inline Copilot-suggested code and comments explaining how to safeguard or anonymize user information (e.g., hashing emails, not storing data unencrypted).



Task 2:

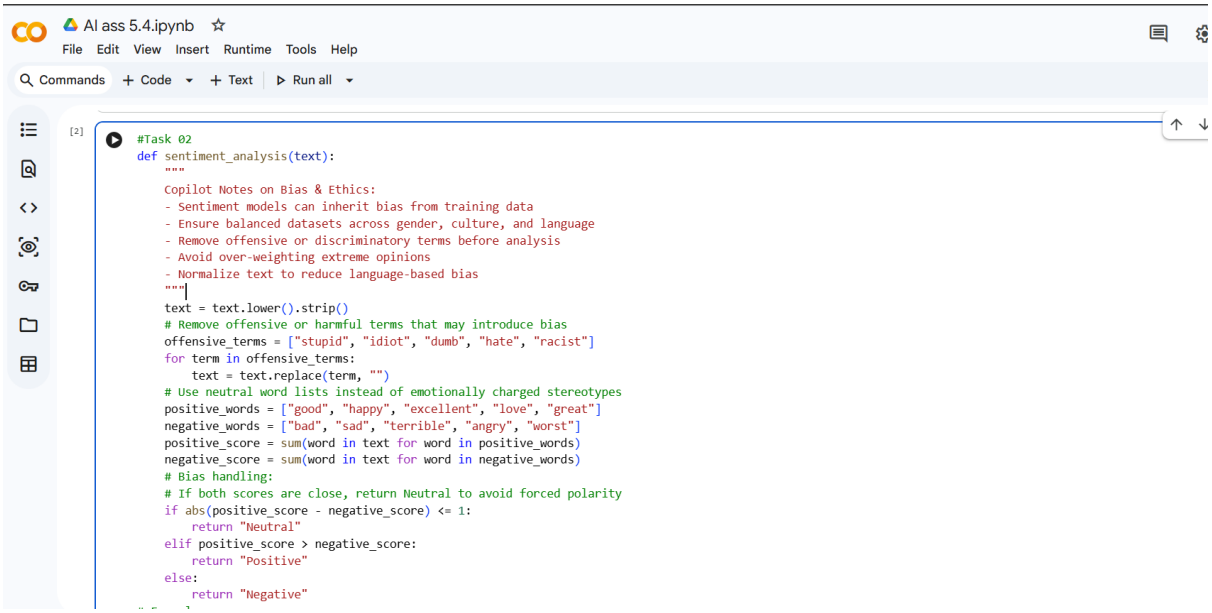
Ask Copilot to generate a Python function for sentiment analysis.

Then prompt Copilot to identify and handle potential biases in the

data.

Expected Output #2:

Copilot-generated code with additions or comments addressing bias mitigation strategies (e.g., balancing dataset, removing offensive terms).



Task 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.

Expected Output #3:

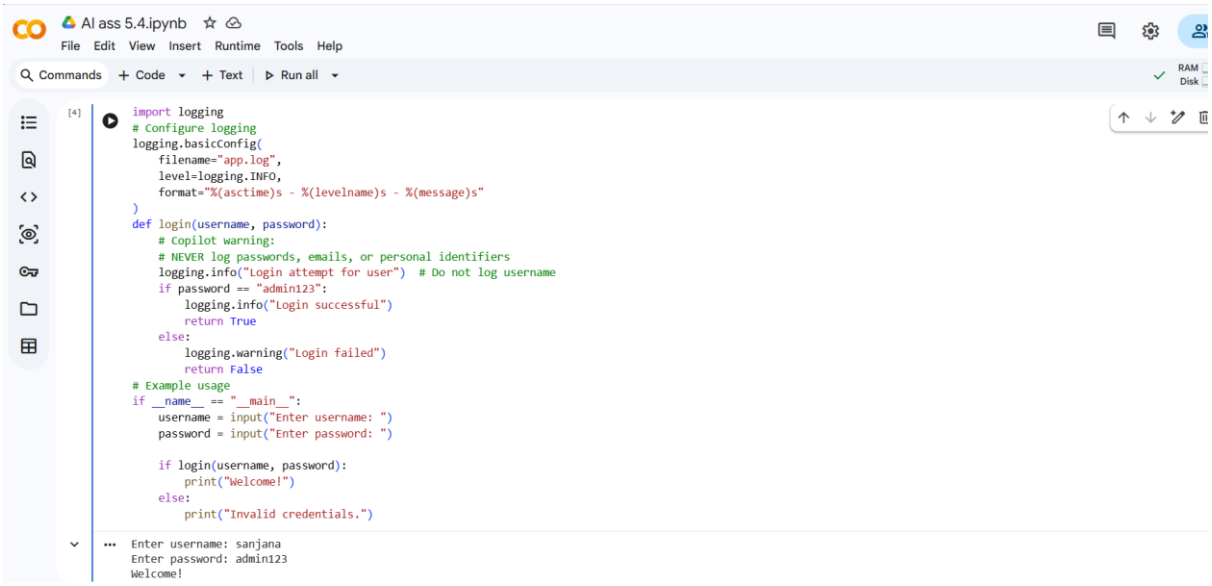
Copilot suggestions that include explanations, fairness checks (e.g., avoiding favoritism), and user feedback options in the code.

Task 4:

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

Expected Output #4:

Logging code that avoids saving personal identifiers (e.g., passwords, emails), and includes comments about ethical logging practices.



Task 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).

Expected Output #5:

• Copilot-generated model code with a README or inline documentation suggesting responsible usage, limitations, and fairness considerations