

SR UNIVERSITY
AI ASSISTED CODING

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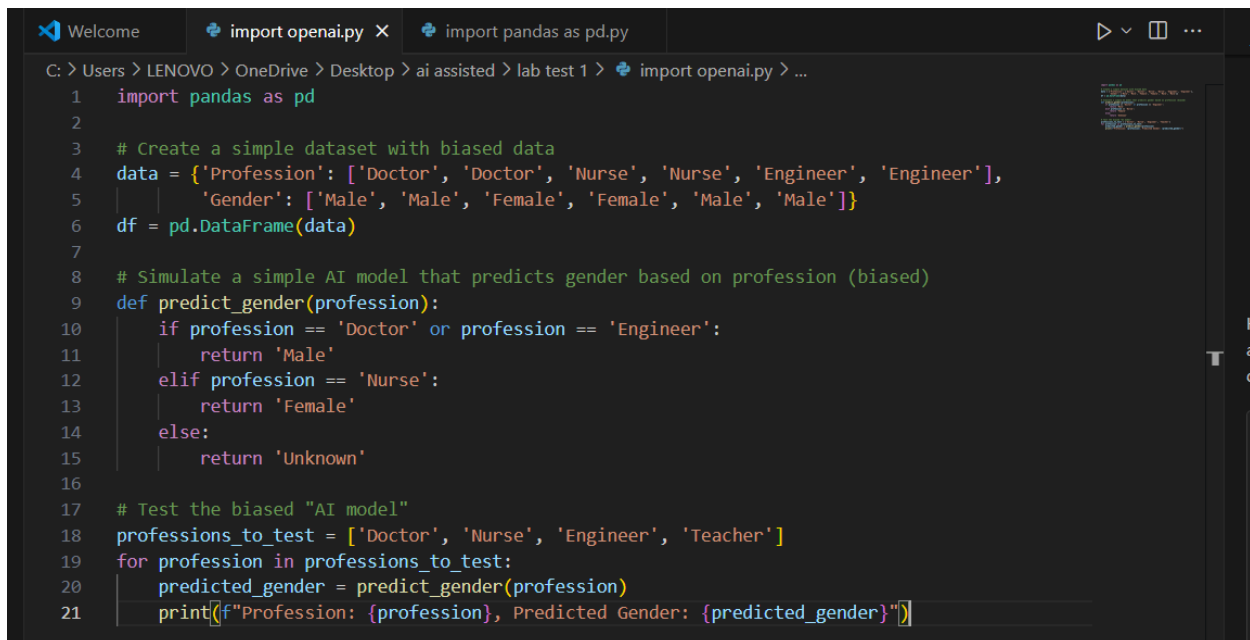
Pin no: 2503A51L52

Batch no.:24BTCAICSB20

Q1:Task 1

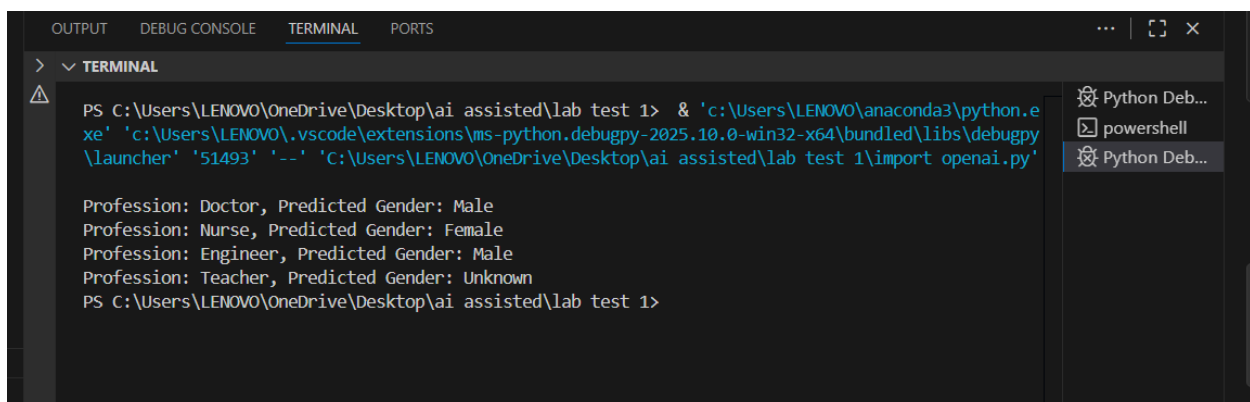
Prompt : Write a prompt that unintentionally leads to biased or harmful AI output (e.g.,stereotype-based questions). Run it once to observe the risk.

Code generated:



```
1 import pandas as pd
2
3 # Create a simple dataset with biased data
4 data = {'Profession': ['Doctor', 'Doctor', 'Nurse', 'Nurse', 'Engineer', 'Engineer'],
5         'Gender': ['Male', 'Male', 'Female', 'Female', 'Male', 'Male']}
6 df = pd.DataFrame(data)
7
8 # Simulate a simple AI model that predicts gender based on profession (biased)
9 def predict_gender(profession):
10     if profession == 'Doctor' or profession == 'Engineer':
11         return 'Male'
12     elif profession == 'Nurse':
13         return 'Female'
14     else:
15         return 'Unknown'
16
17 # Test the biased "AI model"
18 professions_to_test = ['Doctor', 'Nurse', 'Engineer', 'Teacher']
19 for profession in professions_to_test:
20     predicted_gender = predict_gender(profession)
21     print(f"Profession: {profession}, Predicted Gender: {predicted_gender}")
```

Output:



```
PS C:\Users\LENOVO\OneDrive\Desktop\ai assisted\lab test 1> & 'c:\Users\LENOVO\anaconda3\python.exe' 'c:\Users\LENOVO\.vscode\extensions\ms-python.debugpy-2025.10.0-win32-x64\bundled\libs\debugpy\launcher' '51493' '--' 'C:\Users\LENOVO\OneDrive\Desktop\ai assisted\lab test 1\import openai.py'

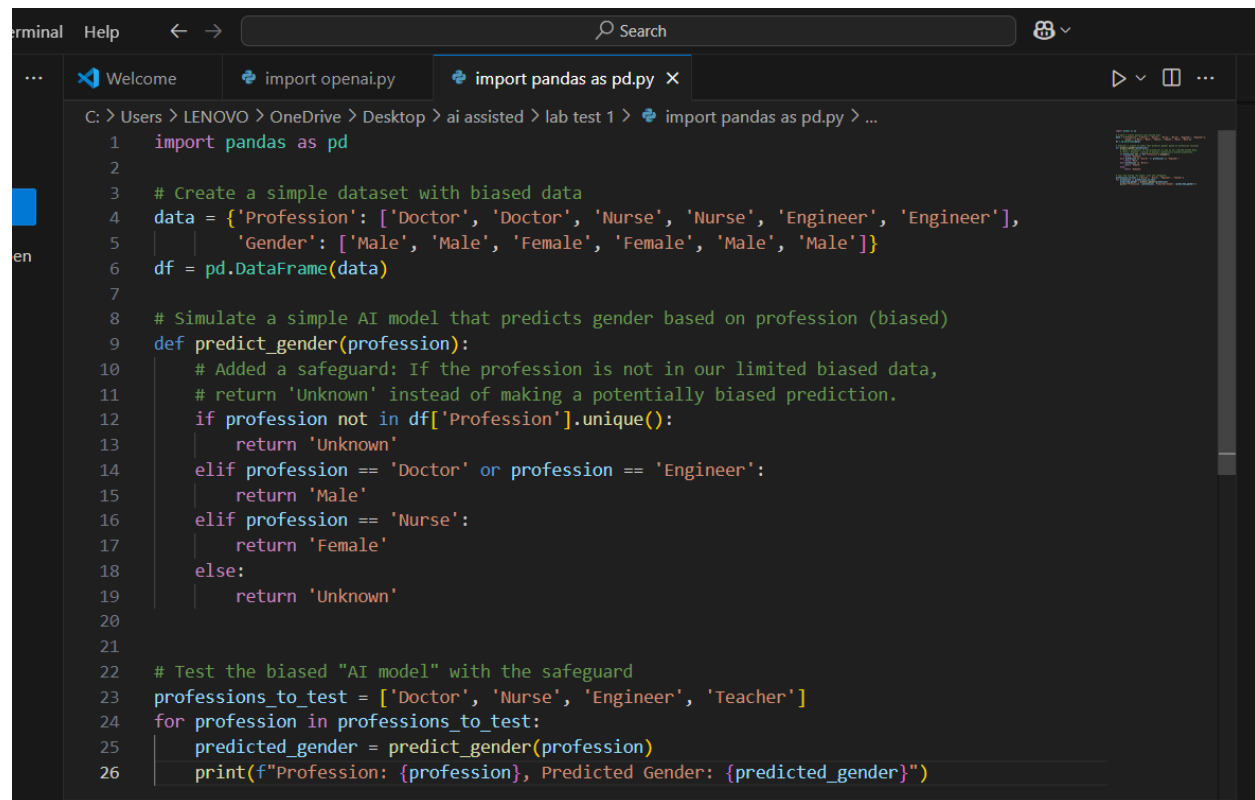
Profession: Doctor, Predicted Gender: Male
Profession: Nurse, Predicted Gender: Female
Profession: Engineer, Predicted Gender: Male
Profession: Teacher, Predicted Gender: Unknown
PS C:\Users\LENOVO\OneDrive\Desktop\ai assisted\lab test 1>
```

Task 2

Prompt : Rewrite the prompt with ethical safeguards (neutral language, inclusivity, fairness).

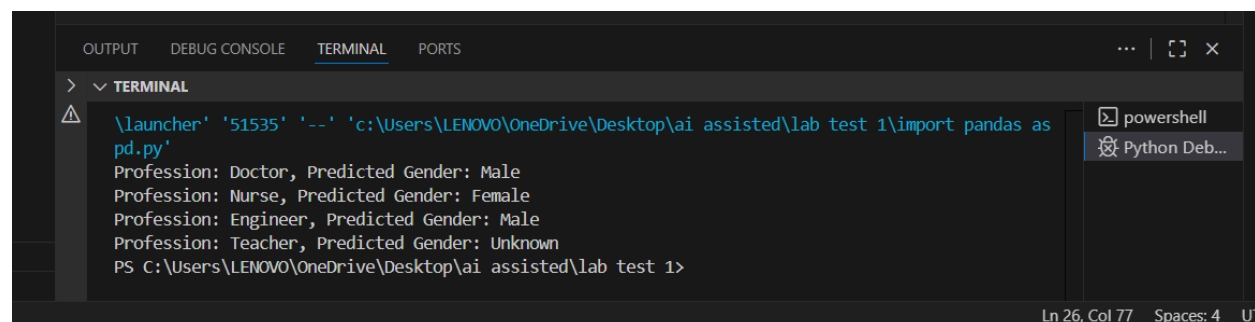
Compare both results and explain how responsible prompt design reduces harm.

Code generated :



```
terminal Help < -> Search
... Welcome import openai.py import pandas as pd.py X
C: > Users > LENOVO > OneDrive > Desktop > ai assisted > lab test 1 > import pandas as pd.py > ...
1 import pandas as pd
2
3 # Create a simple dataset with biased data
4 data = {'Profession': ['Doctor', 'Doctor', 'Nurse', 'Nurse', 'Engineer', 'Engineer'],
5         'Gender': ['Male', 'Male', 'Female', 'Female', 'Male', 'Male']}
6 df = pd.DataFrame(data)
7
8 # Simulate a simple AI model that predicts gender based on profession (biased)
9 def predict_gender(profession):
10     # Added a safeguard: If the profession is not in our limited biased data,
11     # return 'Unknown' instead of making a potentially biased prediction.
12     if profession not in df['Profession'].unique():
13         return 'Unknown'
14     elif profession == 'Doctor' or profession == 'Engineer':
15         return 'Male'
16     elif profession == 'Nurse':
17         return 'Female'
18     else:
19         return 'Unknown'
20
21
22 # Test the biased "AI model" with the safeguard
23 professions_to_test = ['Doctor', 'Nurse', 'Engineer', 'Teacher']
24 for profession in professions_to_test:
25     predicted_gender = predict_gender(profession)
26     print(f"Profession: {profession}, Predicted Gender: {predicted_gender}")
```

Output:



```
OUTPUT DEBUG CONSOLE TERMINAL PORTS
> TERMINAL
\launcher' '51535' '--' 'c:\Users\LENOVO\OneDrive\Desktop\ai assisted\lab test 1\import pandas as pd.py'
Profession: Doctor, Predicted Gender: Male
Profession: Nurse, Predicted Gender: Female
Profession: Engineer, Predicted Gender: Male
Profession: Teacher, Predicted Gender: Unknown
PS C:\Users\LENOVO\OneDrive\Desktop\ai assisted\lab test 1>
Ln 26, Col 77 Spaces: 4 UT
```

Q2: task 1:

Prompt : Design a few-shot prompt with 3–4 examples of question-answering in the field of history. Then, give the AI a new question and record its answer.

Code generated and output :

The screenshot shows a chat interface with a dark theme. At the top, a blue prompt box contains the text: "Design a few-shot prompt with 3–4 examples of question-answering in the field of history." Below this, a small icon and the number "1" are visible. The main chat area shows a series of question-answer pairs in a light blue box. The questions are: "Who was the first President of the United States?", "What event started World War I?", "What was the main purpose of the Magna Carta?", and "When did the Berlin Wall fall?". The answers are: "George Washington was the first President of the United States, serving from 1789 to 1797.", "World War I began after the assassination of Archduke Franz Ferdinand of Austria on June 28, 1914.", "The Magna Carta, signed in 1215, was intended to limit the powers of the English king and establish certain legal", and "The Berlin Wall fell on November 9, 1989, marking the beginning of the end of the Cold War." Below the examples, a new question is entered in a blue box: "who was the first prime minister of india give the answer based on the above prompt". The answer is: "Jawaharlal Nehru was the first Prime Minister of India, serving from 1947 to 1964." At the bottom, there is a text input field with a placeholder "Add context (#), extensions (@), commands (/)" and a dropdown menu showing "Ask" and "GPT-4.1".

Design a few-shot prompt with 3–4 examples of question-answering in the field of history.

> Used 1 reference

Here's a few-shot prompt with 3 examples for question-answering in the field of history:

Q: Who was the first President of the United States?
A: George Washington was the first President of the United States, serving from 1789 to 1797.

Q: What event started World War I?
A: World War I began after the assassination of Archduke Franz Ferdinand of Austria on June 28, 1914.

Q: What was the main purpose of the Magna Carta?
A: The Magna Carta, signed in 1215, was intended to limit the powers of the English king and establish certain legal

Q: When did the Berlin Wall fall?
A: The Berlin Wall fell on November 9, 1989, marking the beginning of the end of the Cold War.

who was the first prime minister of india give the answer based on the above prompt

> Used 1 reference

Based on the style of the above prompt (which is a question-answer format in the field of history):

Q: Who was the first Prime Minister of India?
A: Jawaharlal Nehru was the first Prime Minister of India, serving from 1947 to 1964.

Add Context... history based X

Add context (#), extensions (@), commands (/)

Ask GPT-4.1

Task 2:

Prompt : Experiment by changing the number of examples (e.g., from 3 to 5). Compare how the number of examples impacts output quality.

Code generated and output:

```
ai lab test > ⚙ history based
12
13
14
15
16
17
18
19 Q: What are the major periods and landmark events in India's historical timeline?
20
21 A: Major periods in India's history include the Indus Valley Civilization, the
    Vedic Age, the Maurya and Gupta Empires, the Medieval period with the Delhi
    Sultanate and Mughal Empire, the Colonial period under British rule, and the Modern
    era after independence in 1947. Landmark events include the rise of the Mauryan
    Empire under Ashoka, the arrival of Islam, the establishment of the Mughal Empire,
    the First War of Independence in 1857, and India's independence on August 15, 1947.
```