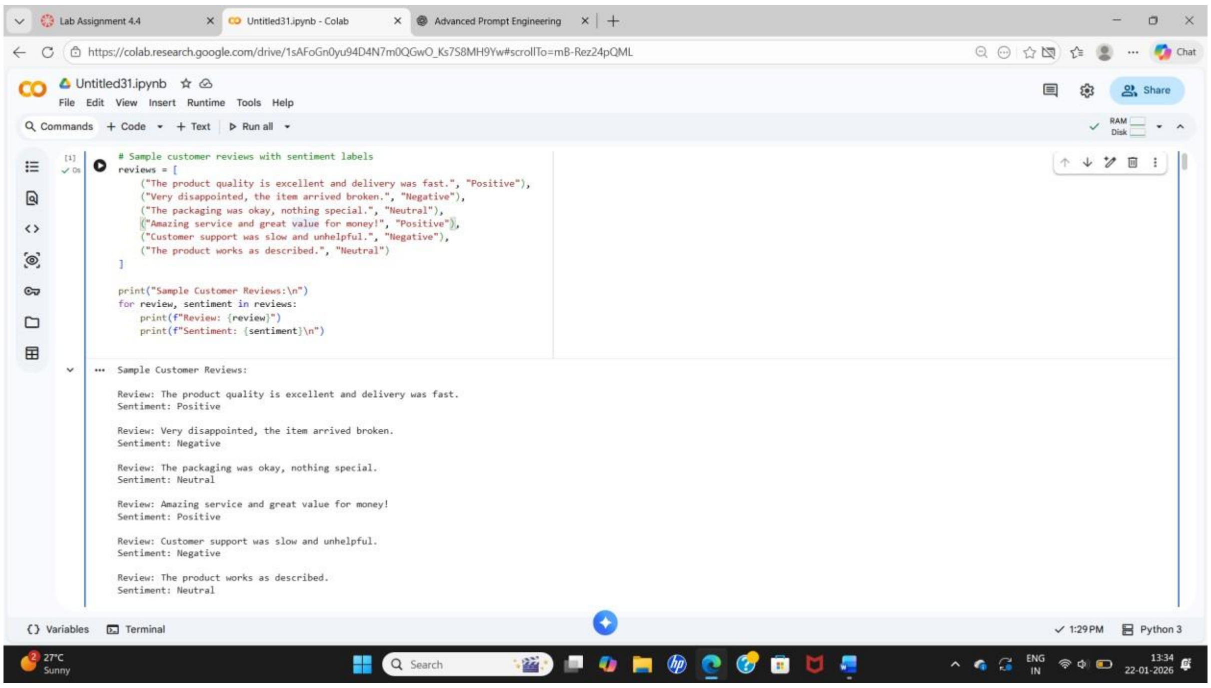
LAB ASSIGNMENT 4.4

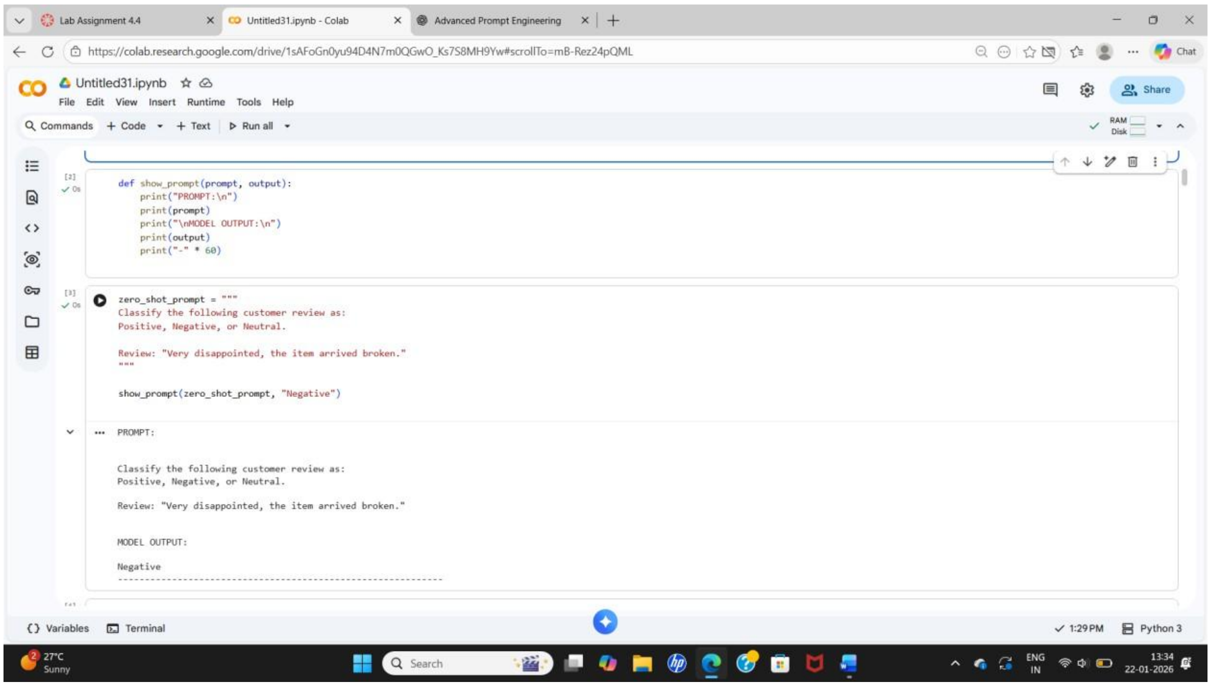
NAME: M.Geethika ID NO: 2303A52276 SUBJECT: AI ASST CODING

1. Scenario



```
# Sample customer reviews with sentiment labels
reviews = [
    ("The product quality is excellent and delivery was fast.", "Positive"),
    ("Very disappointed, the item arrived broken.", "Negative"),
    ("The packaging was okay, nothing special.", "Neutral"),
    ("Amazing service and great value for money!", "Positive"),
    ("Customer support was slow and unhelpful.", "Negative"),
    ("The product works as described.", "Neutral")
]

print("Sample Customer Reviews:\n")
for review, sentiment in reviews:
    print(f"Review: {review}")
    print(f"Sentiment: {sentiment}\n")
```

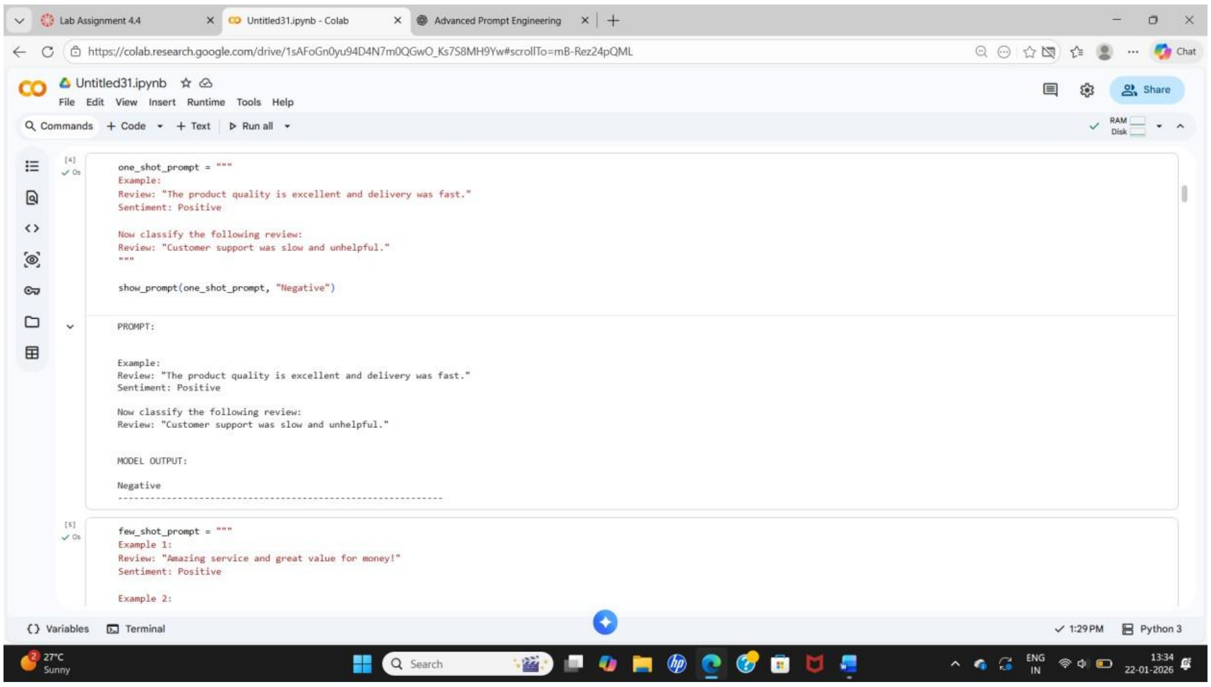
```
Sample Customer Reviews:

Review: The product quality is excellent and delivery was fast.
Sentiment: Positive

Review: Very disappointed, the item arrived broken.
Sentiment: Negative

Review: The packaging was okay, nothing special.
Sentiment: Neutral

Review: Amazing service and great value for money!
Sentiment: Positive

Review: Customer support was slow and unhelpful.
Sentiment: Negative

Review: The product works as described.
Sentiment: Neutral
```



```
def show_prompt(prompt, output):
    print("PROMPT:\n")
    print(prompt)
    print("\nMODEL OUTPUT:\n")
    print(output)
    print("-" * 60)
```

```
zero_shot_prompt = """
Classify the following customer review as:
Positive, Negative, or Neutral.

Review: "Very disappointed, the item arrived broken."
"""

show_prompt(zero_shot_prompt, "Negative")
```

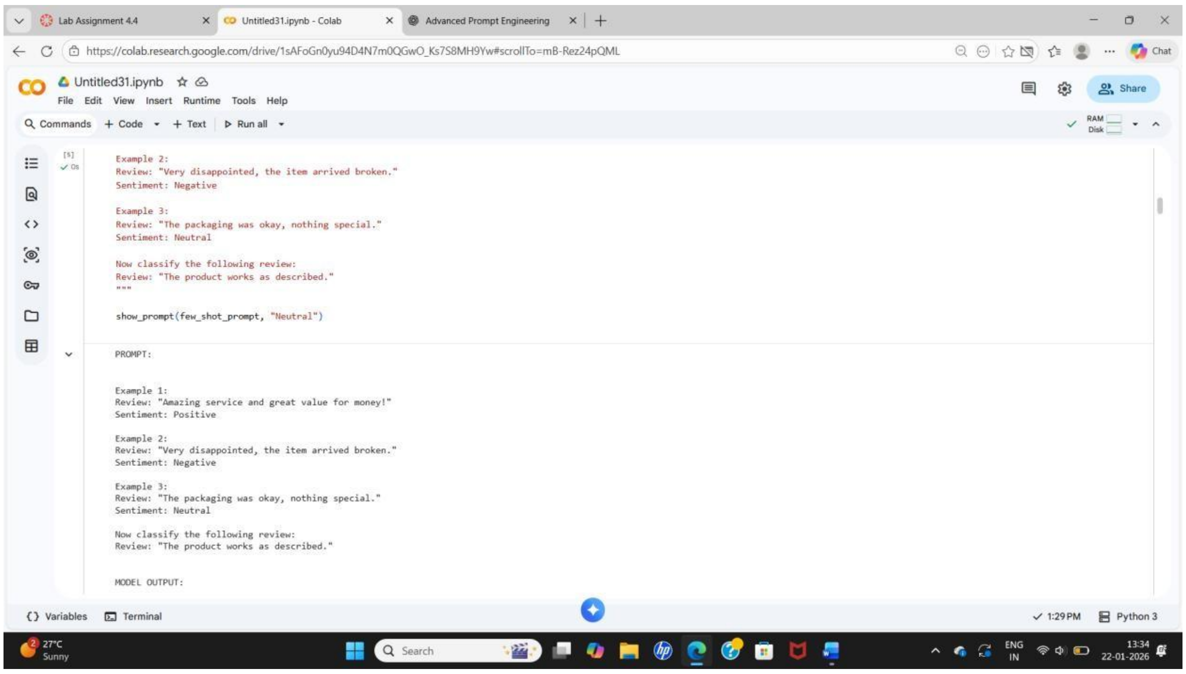
```
PROMPT:


Classify the following customer review as:
Positive, Negative, or Neutral.

Review: "Very disappointed, the item arrived broken."


MODEL OUTPUT:

Negative
------------------------------------------------------------
```


Lab Assignment 4.4
Untitled31.ipynb - Colab
Advanced Prompt Engineering
https://colab.research.google.com/drive/1sAFoGn0yu94D4N7m0QGwO_Ks7S8MH9Yw#scrollTo=mB-Rez24pQML
Untitled31.ipynb
File Edit View Insert Runtime Tools Help
Commands + Code + Text Run all
Share
Variables Terminal
1:29 PM Python 3

```
[4]
one_shot_prompt = """
Example:
Review: "The product quality is excellent and delivery was fast."
Sentiment: Positive

Now classify the following review:
Review: "Customer support was slow and unhelpful."
"""

show_prompt(one_shot_prompt, "Negative")
```

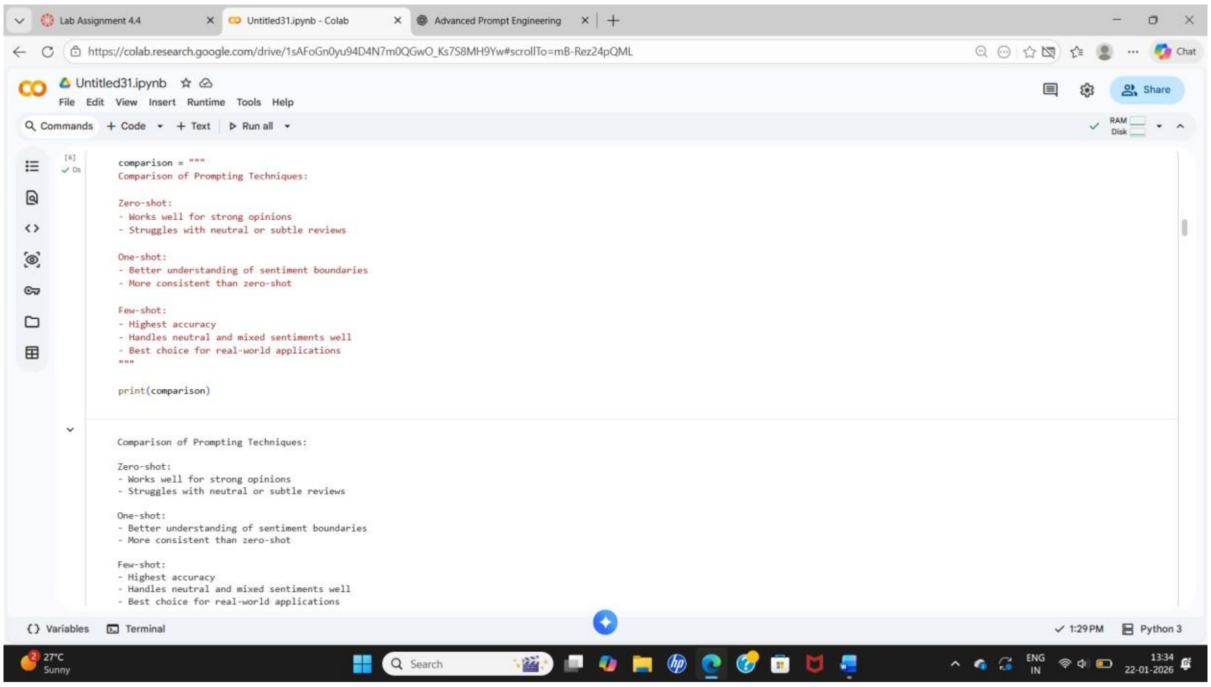
```
PROMPT:


Example:
Review: "The product quality is excellent and delivery was fast."
Sentiment: Positive

Now classify the following review:
Review: "Customer support was slow and unhelpful."


MODEL OUTPUT:

Negative
------------------------------------------------------------
```

```
[5]
few_shot_prompt = """
Example 1:
Review: "Amazing service and great value for money!"
Sentiment: Positive

Example 2:
```


Lab Assignment 4.4
Untitled31.ipynb - Colab
Advanced Prompt Engineering
https://colab.research.google.com/drive/1sAFoGn0yu94D4N7m0QGwO_Ks7S8MH9Yw#scrollTo=mB-Rez24pQML
Untitled31.ipynb
File Edit View Insert Runtime Tools Help
Commands + Code + Text Run all
Share
Variables Terminal
1:29 PM Python 3

```
[5]
Example 2:
Review: "Very disappointed, the item arrived broken."
Sentiment: Negative

Example 3:
Review: "The packaging was okay, nothing special."
Sentiment: Neutral

Now classify the following review:
Review: "The product works as described."
"""

show_prompt(few_shot_prompt, "Neutral")
```

```
PROMPT:


Example 1:
Review: "Amazing service and great value for money!"
Sentiment: Positive

Example 2:
Review: "Very disappointed, the item arrived broken."
Sentiment: Negative

Example 3:
Review: "The packaging was okay, nothing special."
Sentiment: Neutral

Now classify the following review:
Review: "The product works as described."


MODEL OUTPUT:
```



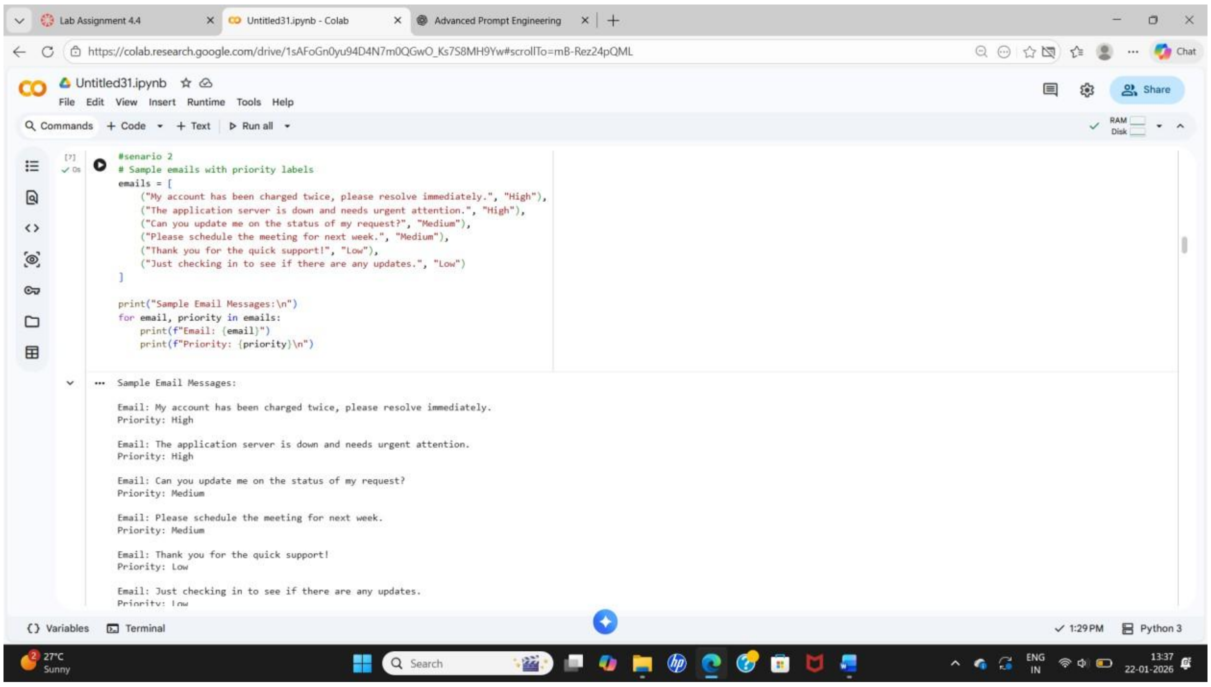
```python
comparison = """
Comparison of Prompting Techniques:

Zero-shot:
- Works well for strong opinions
- Struggles with neutral or subtle reviews

One-shot:
- Better understanding of sentiment boundaries
- More consistent than zero-shot

Few-shot:
- Highest accuracy
- Handles neutral and mixed sentiments well
- Best choice for real-world applications
"""

print(comparison)
```

```
Comparison of Prompting Techniques:

Zero-shot:
- Works well for strong opinions
- Struggles with neutral or subtle reviews

One-shot:
- Better understanding of sentiment boundaries
- More consistent than zero-shot

Few-shot:
- Highest accuracy
- Handles neutral and mixed sentiments well
- Best choice for real-world applications
```

FINAL CONCLUSION:

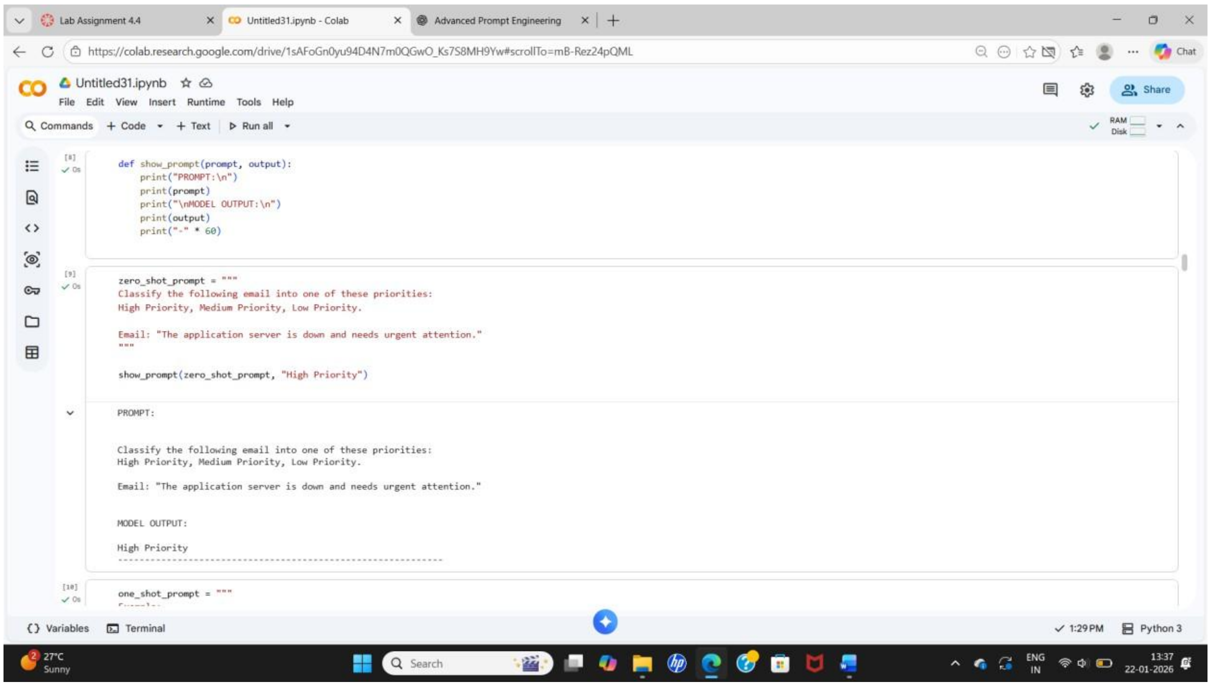
Few-shot prompting provides the best sentiment classification accuracy because multiple examples help the model understand sentiment patterns, tone, and neutrality more effectively than zero-shot or one-shot methods.

2. Scenario



```
#senario 2
# Sample emails with priority labels
emails = [
    ("My account has been charged twice, please resolve immediately.", "High"),
    ("The application server is down and needs urgent attention.", "High"),
    ("Can you update me on the status of my request?", "Medium"),
    ("Please schedule the meeting for next week.", "Medium"),
    ("Thank you for the quick support!", "Low"),
    ("Just checking in to see if there are any updates.", "Low")
]

print("Sample Email Messages:\n")
for email, priority in emails:
    print(f"Email: {email}")
    print(f"Priority: {priority}\n")
```

```
Sample Email Messages:

Email: My account has been charged twice, please resolve immediately.
Priority: High

Email: The application server is down and needs urgent attention.
Priority: High

Email: Can you update me on the status of my request?
Priority: Medium

Email: Please schedule the meeting for next week.
Priority: Medium

Email: Thank you for the quick support!
Priority: Low

Email: Just checking in to see if there are any updates.
Priority: Low
```

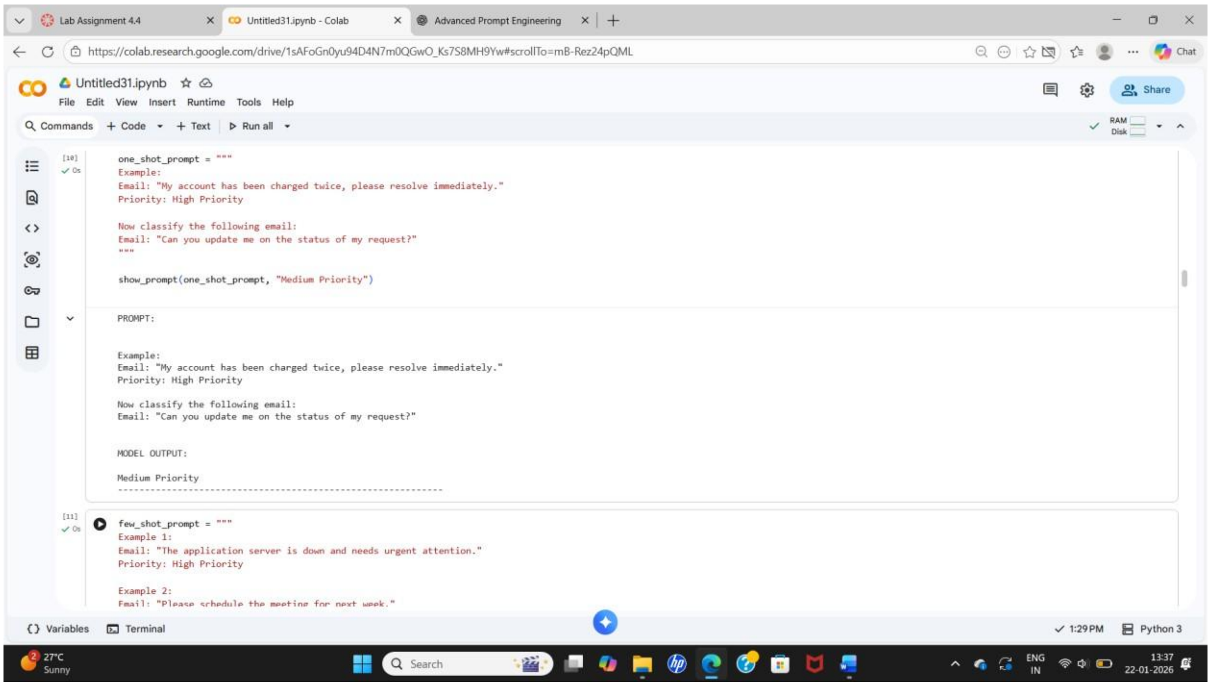


```
def show_prompt(prompt, output):
    print("PROMPT:\n")
    print(prompt)
    print("\nMODEL OUTPUT:\n")
    print(output)
    print("-" * 60)
```

```
zero_shot_prompt = """
Classify the following email into one of these priorities:
High Priority, Medium Priority, Low Priority.

Email: "The application server is down and needs urgent attention."
"""

show_prompt(zero_shot_prompt, "High Priority")
```

```
PROMPT:


Classify the following email into one of these priorities:
High Priority, Medium Priority, Low Priority.

Email: "The application server is down and needs urgent attention."


MODEL OUTPUT:

High Priority
------------------------------------------------------------
```

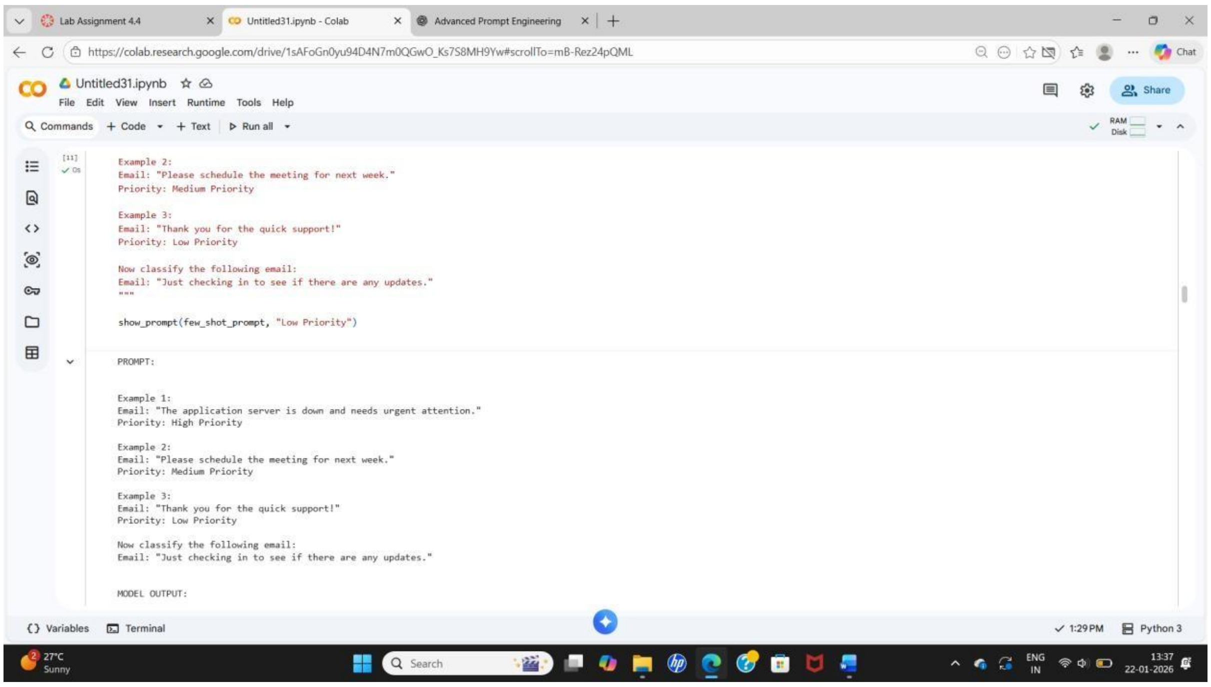
```
one_shot_prompt = """
```



```
one_shot_prompt = """
Example:
Email: "My account has been charged twice, please resolve immediately."
Priority: High Priority

Now classify the following email:
Email: "Can you update me on the status of my request?"
"""

show_prompt(one_shot_prompt, "Medium Priority")
```

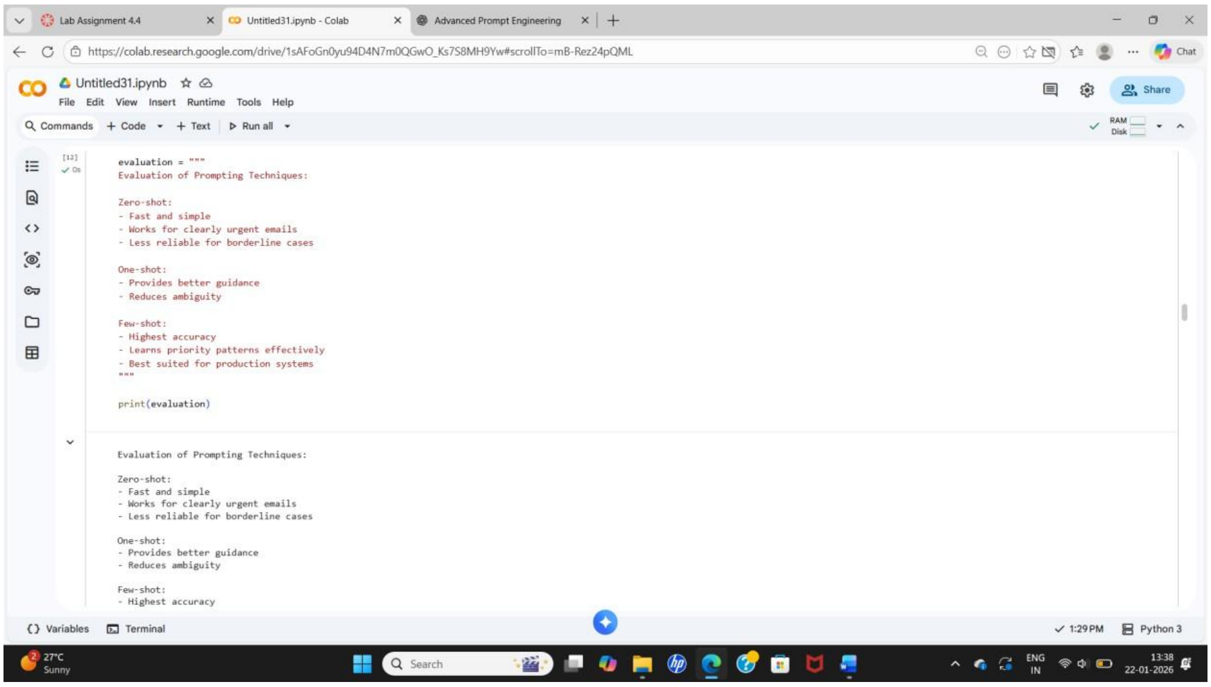
```
PROMPT:


Example:
Email: "My account has been charged twice, please resolve immediately."
Priority: High Priority

Now classify the following email:
Email: "Can you update me on the status of my request?"


MODEL OUTPUT:

Medium Priority
------------------------------------------------------------
```

```
few_shot_prompt = """
Example 1:
Email: "The application server is down and needs urgent attention."
Priority: High Priority

Example 2:
Email: "Please schedule the meeting for next week."
```



```
Example 2:
Email: "Please schedule the meeting for next week."
Priority: Medium Priority

Example 3:
Email: "Thank you for the quick support!"
Priority: Low Priority

Now classify the following email:
Email: "Just checking in to see if there are any updates."
"""

show_prompt(few_shot_prompt, "Low Priority")
```

```
PROMPT:


Example 1:
Email: "The application server is down and needs urgent attention."
Priority: High Priority

Example 2:
Email: "Please schedule the meeting for next week."
Priority: Medium Priority

Example 3:
Email: "Thank you for the quick support!"
Priority: Low Priority

Now classify the following email:
Email: "Just checking in to see if there are any updates."


MODEL OUTPUT:
```



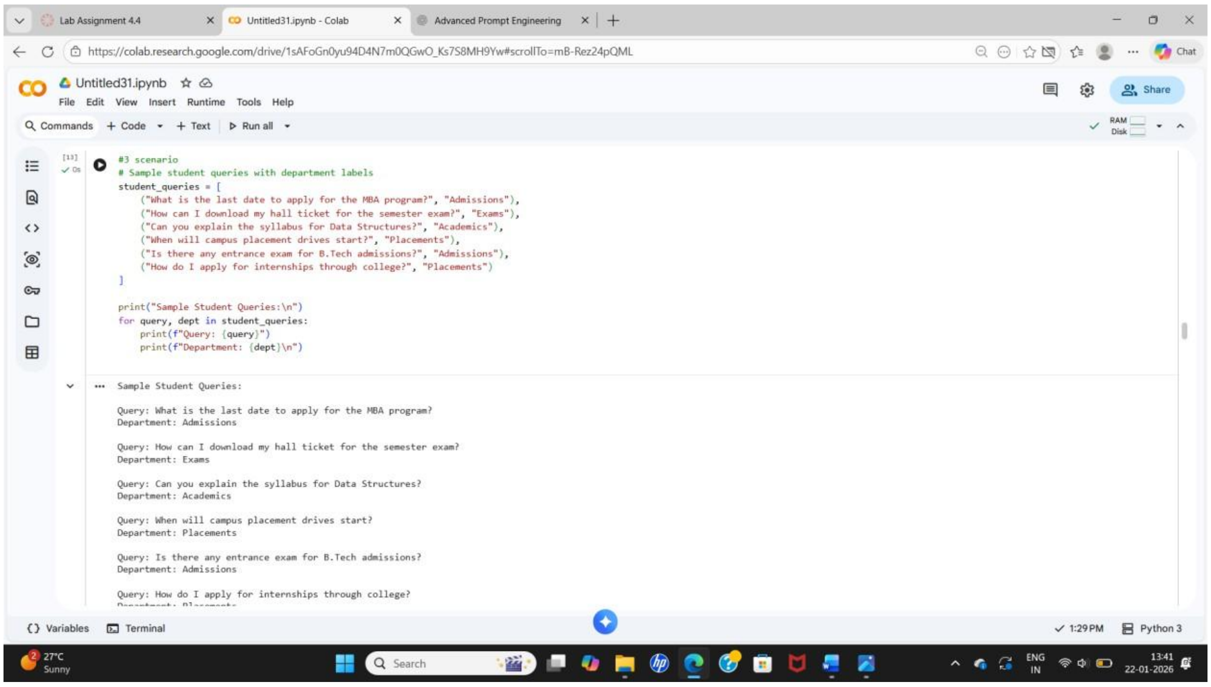
```
evaluation = """
Evaluation of Prompting Techniques:

Zero-shot:
- Fast and simple
- Works for clearly urgent emails
- Less reliable for borderline cases

One-shot:
- Provides better guidance
- Reduces ambiguity

Few-shot:
- Highest accuracy
- Learns priority patterns effectively
- Best suited for production systems
"""

print(evaluation)
```

```
Evaluation of Prompting Techniques:

Zero-shot:
- Fast and simple
- Works for clearly urgent emails
- Less reliable for borderline cases

One-shot:
- Provides better guidance
- Reduces ambiguity

Few-shot:
- Highest accuracy
```

FINAL CONCLUSION:

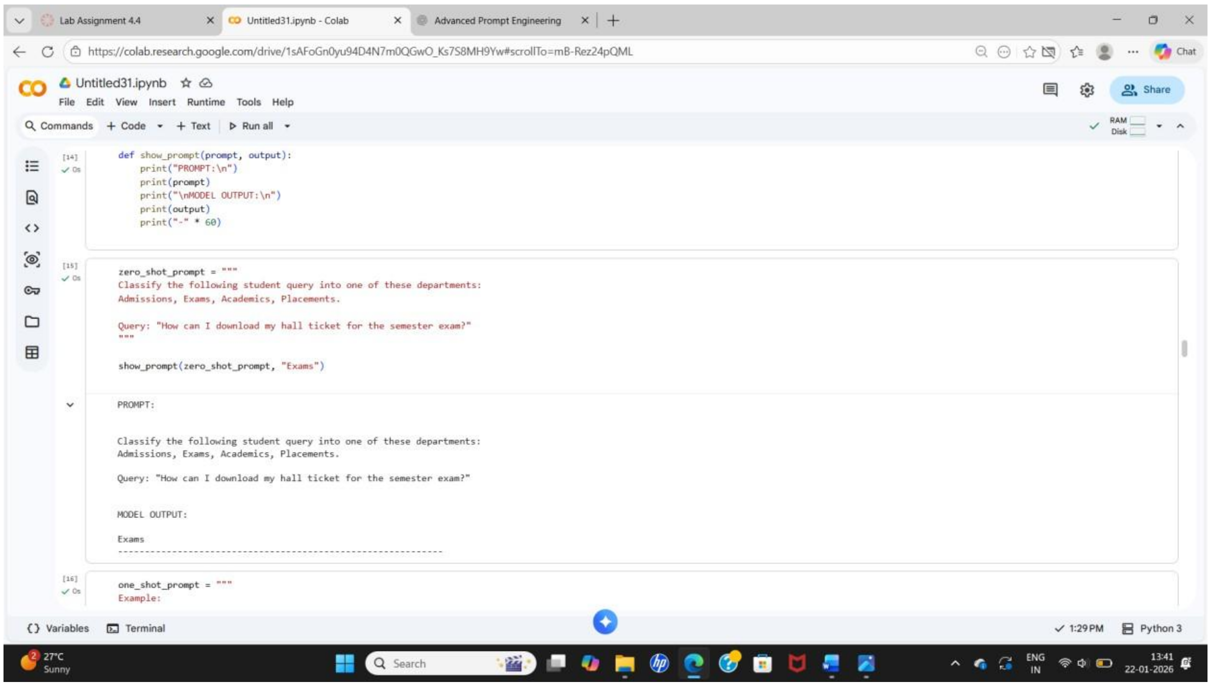
Few-shot prompting produces the most reliable results because multiple examples help the model clearly distinguish between high, medium, and low urgency patterns in emails.

3. Scenario



```python
#3 scenario
# Sample student queries with department labels
student_queries = [
    ("What is the last date to apply for the MBA program?", "Admissions"),
    ("How can I download my hall ticket for the semester exam?", "Exams"),
    ("Can you explain the syllabus for Data Structures?", "Academics"),
    ("When will campus placement drives start?", "Placements"),
    ("Is there any entrance exam for B.Tech admissions?", "Admissions"),
    ("How do I apply for internships through college?", "Placements")
]

print("Sample Student Queries:\n")
for query, dept in student_queries:
    print(f"Query: {query}")
    print(f"Department: {dept}\n")
```

```
Sample Student Queries:

Query: What is the last date to apply for the MBA program?
Department: Admissions

Query: How can I download my hall ticket for the semester exam?
Department: Exams

Query: Can you explain the syllabus for Data Structures?
Department: Academics

Query: When will campus placement drives start?
Department: Placements

Query: Is there any entrance exam for B.Tech admissions?
Department: Admissions

Query: How do I apply for internships through college?
```

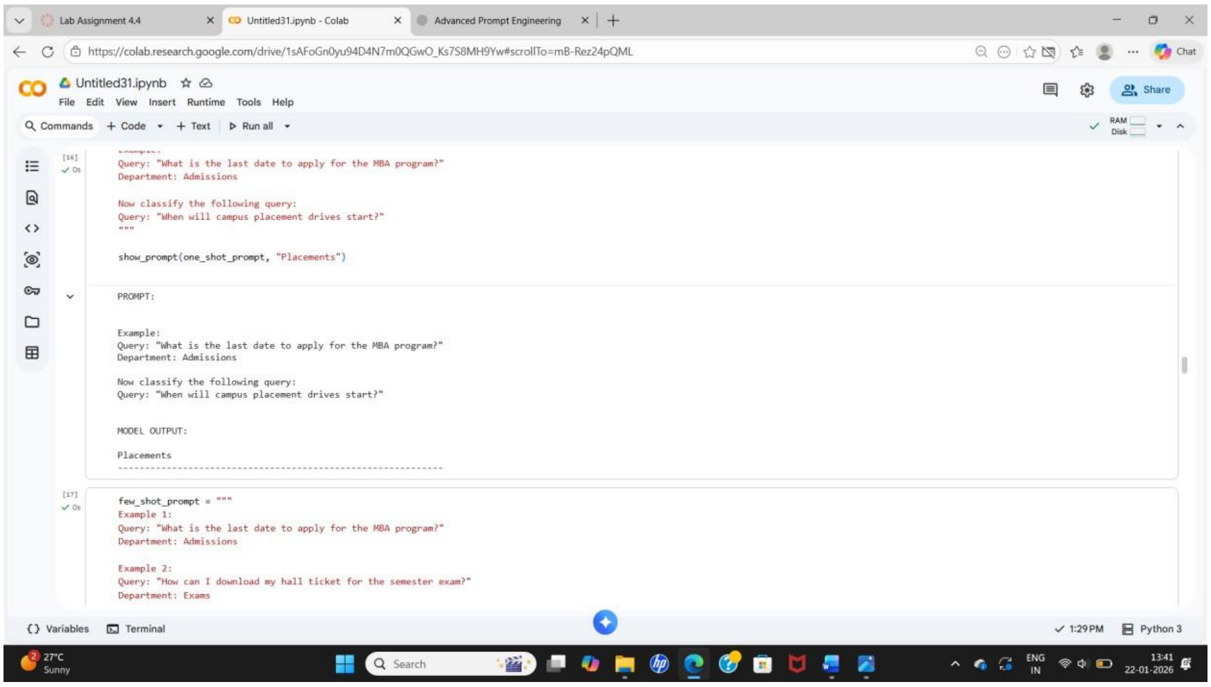


```python
def show_prompt(prompt, output):
    print("PROMPT:\n")
    print(prompt)
    print("\nMODEL OUTPUT:\n")
    print(output)
    print("-" * 60)
```

```python
zero_shot_prompt = """
Classify the following student query into one of these departments:
Admissions, Exams, Academics, Placements.

Query: "How can I download my hall ticket for the semester exam?"
"""

show_prompt(zero_shot_prompt, "Exams")
```

```
PROMPT:


Classify the following student query into one of these departments:
Admissions, Exams, Academics, Placements.

Query: "How can I download my hall ticket for the semester exam?"


MODEL OUTPUT:

Exams
------------------------------------------------------------
```

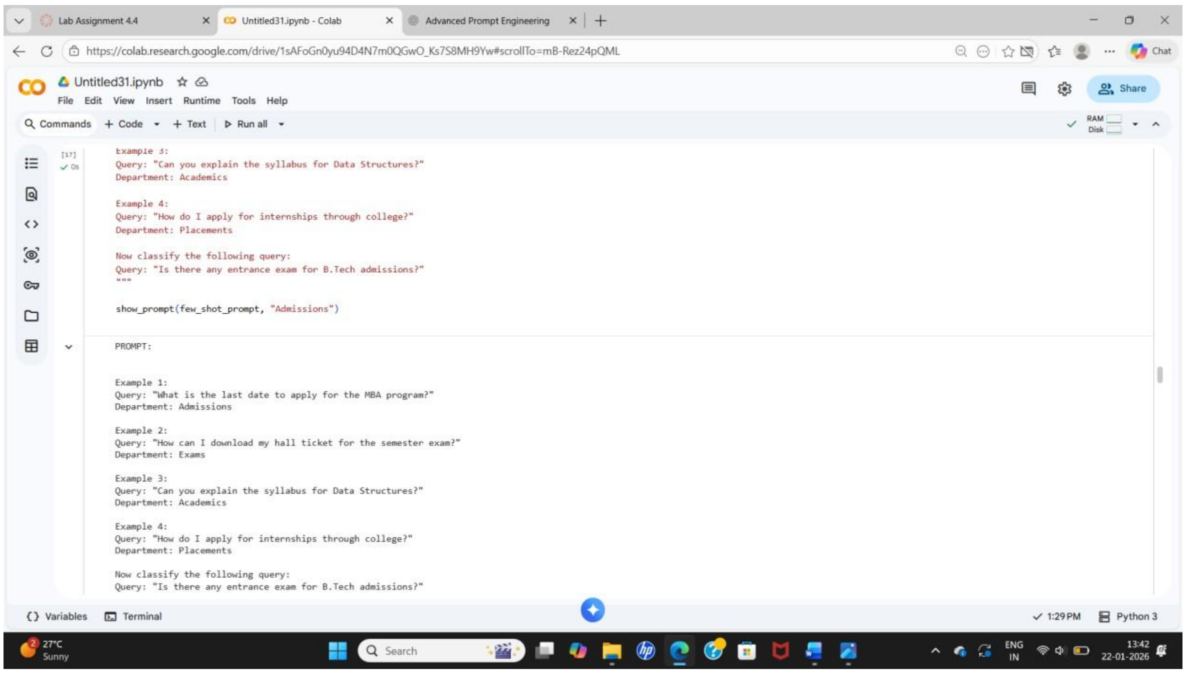
```python
one_shot_prompt = """
Example:
```


Lab Assignment 4.4
Untitled31.ipynb - Colab
Advanced Prompt Engineering
https://colab.research.google.com/drive/1sAFoGn0yu94D4N7m0QGwO_Ks7S8MH9Yw#scrollTo=mB-Rez24pQML
Untitled31.ipynb
File Edit View Insert Runtime Tools Help
Commands + Code + Text Run all
Share
Variables Terminal
1:29 PM Python 3
27°C Sunny
13:41 22-01-2026

```
[16]
Query: "What is the last date to apply for the MBA program?"
Department: Admissions

Now classify the following query:
Query: "When will campus placement drives start?"
"""

show_prompt(one_shot_prompt, "Placements")
```

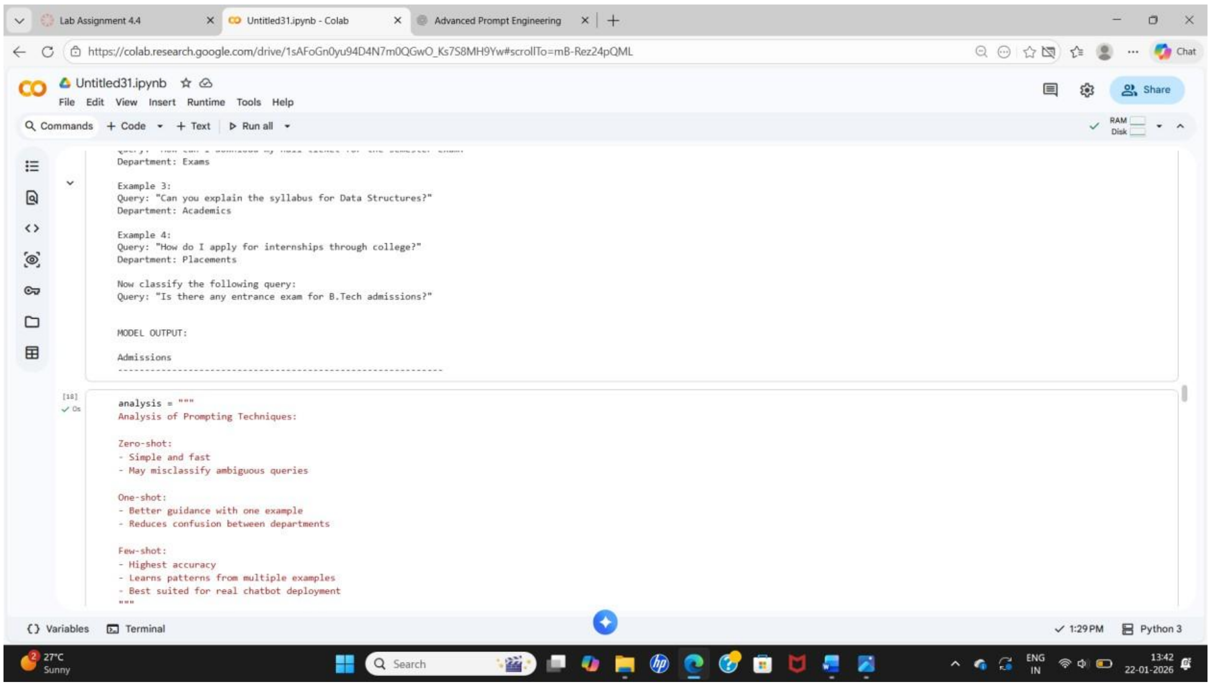
```
PROMPT:


Example:
Query: "What is the last date to apply for the MBA program?"
Department: Admissions

Now classify the following query:
Query: "When will campus placement drives start?"


MODEL OUTPUT:

Placements
------------------------------------------------------------
```

```
[17]
few_shot_prompt = """
Example 1:
Query: "What is the last date to apply for the MBA program?"
Department: Admissions

Example 2:
Query: "How can I download my hall ticket for the semester exam?"
Department: Exams
```


Lab Assignment 4.4
Untitled31.ipynb - Colab
Advanced Prompt Engineering
https://colab.research.google.com/drive/1sAFoGn0yu94D4N7m0QGwO_Ks7S8MH9Yw#scrollTo=mB-Rez24pQML
Untitled31.ipynb
File Edit View Insert Runtime Tools Help
Commands + Code + Text Run all
Share
Variables Terminal
1:29 PM Python 3
27°C Sunny
13:42 22-01-2026

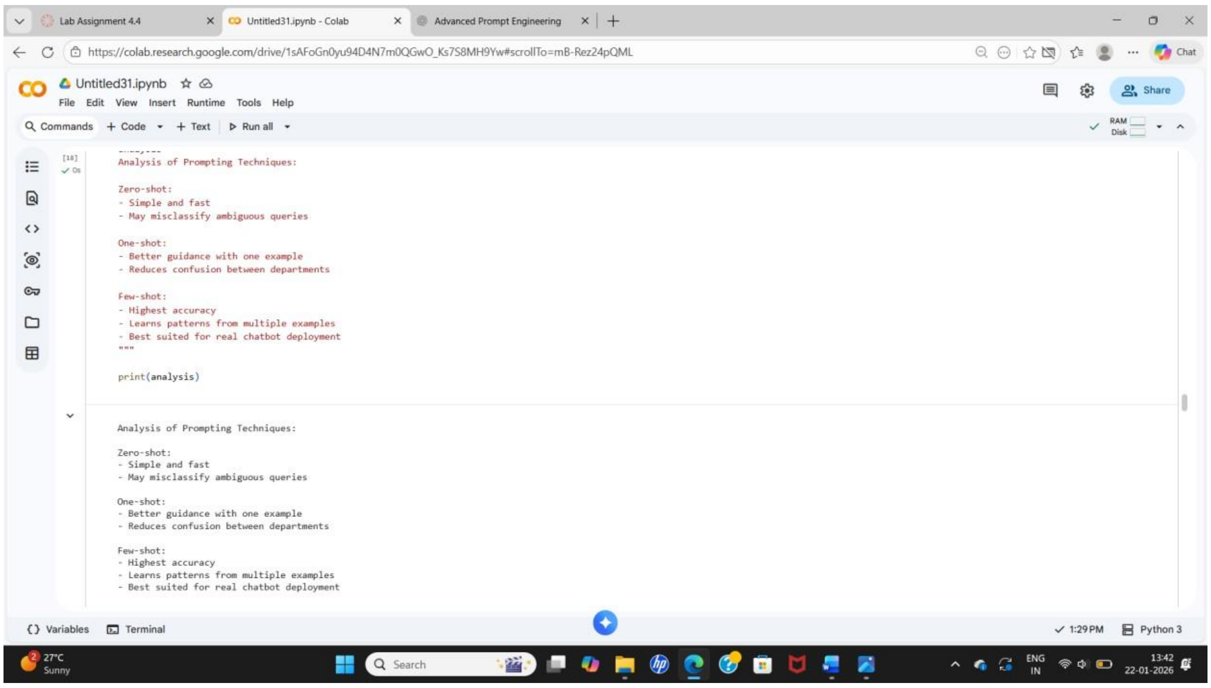
```
[17]
Example 3:
Query: "Can you explain the syllabus for Data Structures?"
Department: Academics

Example 4:
Query: "How do I apply for internships through college?"
Department: Placements

Now classify the following query:
Query: "Is there any entrance exam for B.Tech admissions?"
"""

show_prompt(few_shot_prompt, "Admissions")
```

```
PROMPT:


Example 1:
Query: "What is the last date to apply for the MBA program?"
Department: Admissions

Example 2:
Query: "How can I download my hall ticket for the semester exam?"
Department: Exams

Example 3:
Query: "Can you explain the syllabus for Data Structures?"
Department: Academics

Example 4:
Query: "How do I apply for internships through college?"
Department: Placements

Now classify the following query:
Query: "Is there any entrance exam for B.Tech admissions?"
```



```
Department: Exams

Example 3:
Query: "Can you explain the syllabus for Data Structures?"
Department: Academics

Example 4:
Query: "How do I apply for internships through college?"
Department: Placements

Now classify the following query:
Query: "Is there any entrance exam for B.Tech admissions?"


MODEL OUTPUT:

Admissions
------------------------------------------------------------
```

```
analysis = """
Analysis of Prompting Techniques:

Zero-shot:
- Simple and fast
- May misclassify ambiguous queries

One-shot:
- Better guidance with one example
- Reduces confusion between departments

Few-shot:
- Highest accuracy
- Learns patterns from multiple examples
- Best suited for real chatbot deployment
"""
```



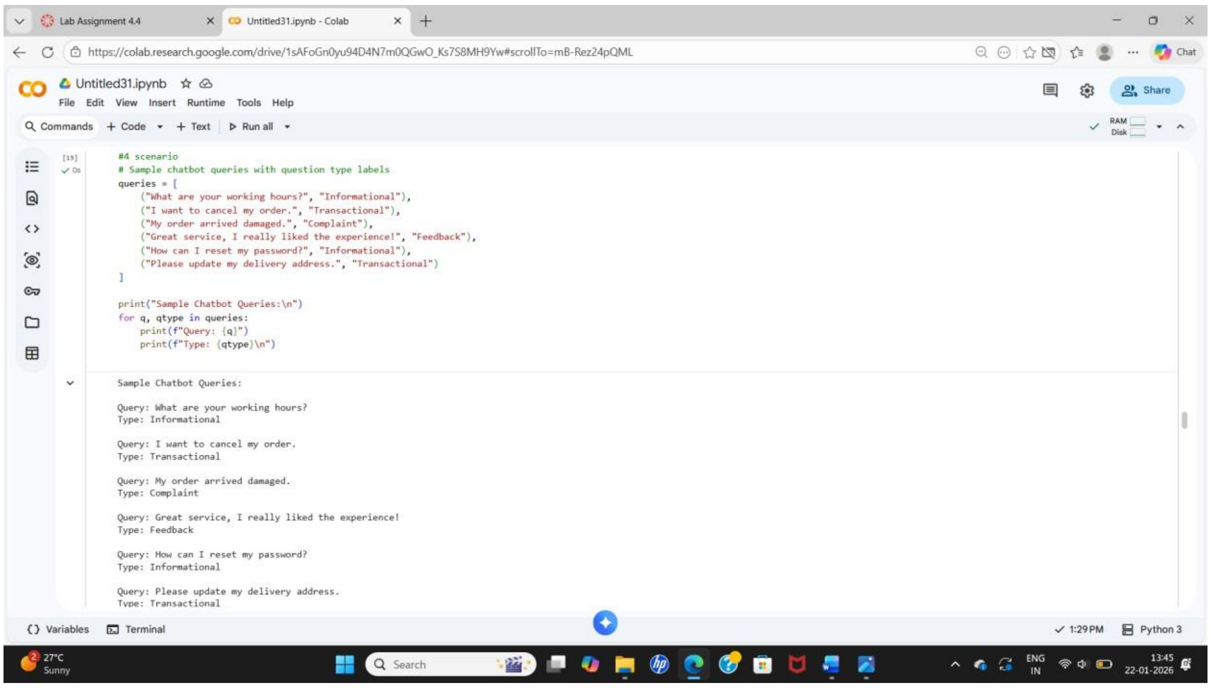
```
Analysis of Prompting Techniques:

Zero-shot:
- Simple and fast
- May misclassify ambiguous queries

One-shot:
- Better guidance with one example
- Reduces confusion between departments

Few-shot:
- Highest accuracy
- Learns patterns from multiple examples
- Best suited for real chatbot deployment
"""

print(analysis)
```

```
Analysis of Prompting Techniques:

Zero-shot:
- Simple and fast
- May misclassify ambiguous queries

One-shot:
- Better guidance with one example
- Reduces confusion between departments

Few-shot:
- Highest accuracy
- Learns patterns from multiple examples
- Best suited for real chatbot deployment
```

FINAL CONCLUSION:

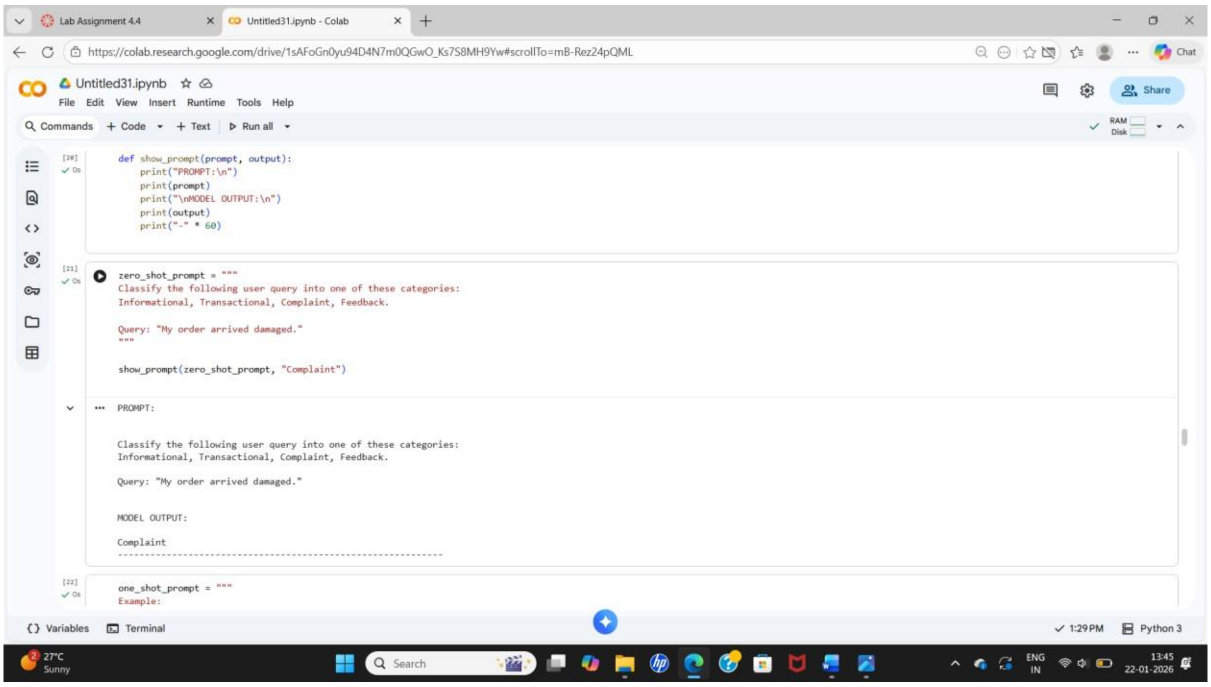
Few-shot prompting significantly improves student query routing accuracy by providing contextual patterns, making it the most effective approach for university chatbots.

4. Scenario



```
[19]
#4 scenario
# Sample chatbot queries with question type labels
queries = [
    ("What are your working hours?", "Informational"),
    ("I want to cancel my order.", "Transactional"),
    ("My order arrived damaged.", "Complaint"),
    ("Great service, I really liked the experience!", "Feedback"),
    ("How can I reset my password?", "Informational"),
    ("Please update my delivery address.", "Transactional")
]

print("Sample Chatbot Queries:\n")
for q, qtype in queries:
    print(f"Query: {q}")
    print(f"Type: {qtype}\n")
```

```
Sample Chatbot Queries:

Query: What are your working hours?
Type: Informational

Query: I want to cancel my order.
Type: Transactional

Query: My order arrived damaged.
Type: Complaint

Query: Great service, I really liked the experience!
Type: Feedback

Query: How can I reset my password?
Type: Informational

Query: Please update my delivery address.
Type: Transactional
```

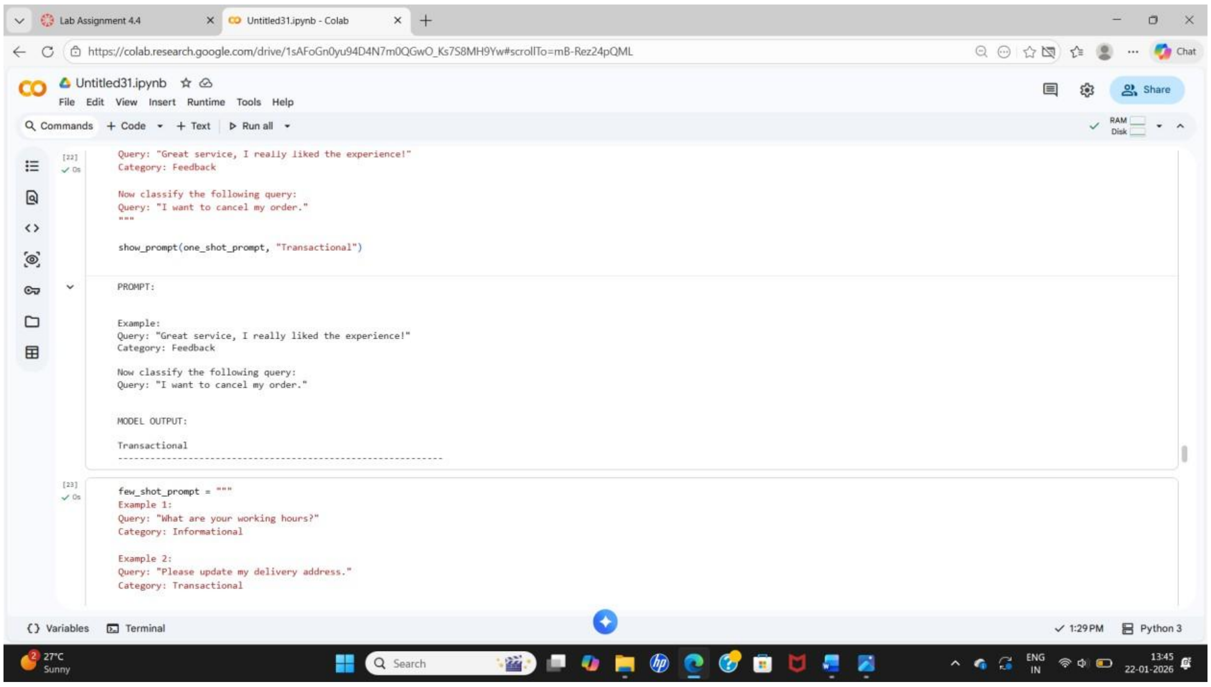


```
[20]
def show_prompt(prompt, output):
    print("PROMPT:\n")
    print(prompt)
    print("\nMODEL OUTPUT:\n")
    print(output)
    print("-" * 60)
```

```
[21]
zero_shot_prompt = """
Classify the following user query into one of these categories:
Informational, Transactional, Complaint, Feedback.

Query: "My order arrived damaged."
"""

show_prompt(zero_shot_prompt, "Complaint")
```

```
PROMPT:


Classify the following user query into one of these categories:
Informational, Transactional, Complaint, Feedback.

Query: "My order arrived damaged."


MODEL OUTPUT:

Complaint
------------------------------------------------------------
```

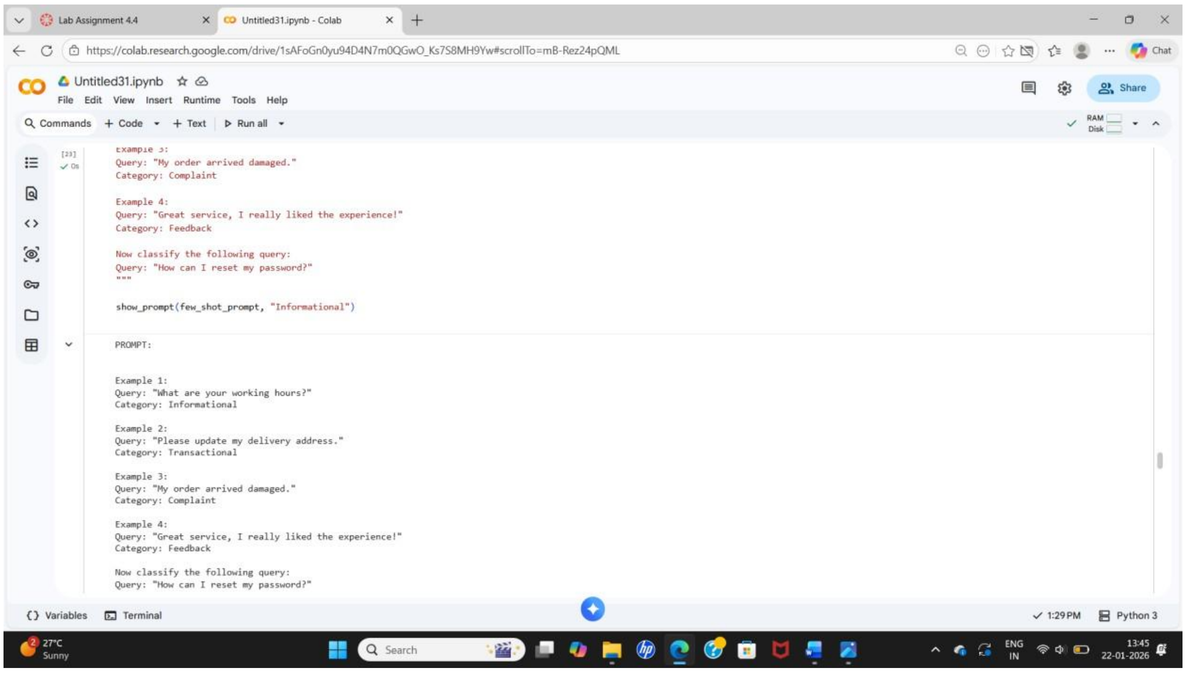
```
[22]
one_shot_prompt = """
Example:
```


Lab Assignment 4.4
Untitled31.ipynb - Colab
https://colab.research.google.com/drive/1sAFoGn0yu94D4N7m0QGwO_Ks7S8MH9Yw#scrollTo=mB-Rez24pQML
Untitled31.ipynb
File Edit View Insert Runtime Tools Help
Commands + Code + Text Run all
Share
Variables Terminal
1:29 PM Python 3
27°C Sunny
13:45 22-01-2026

```
[22]
Query: "Great service, I really liked the experience!"
Category: Feedback

Now classify the following query:
Query: "I want to cancel my order."
"""

show_prompt(one_shot_prompt, "Transactional")
```

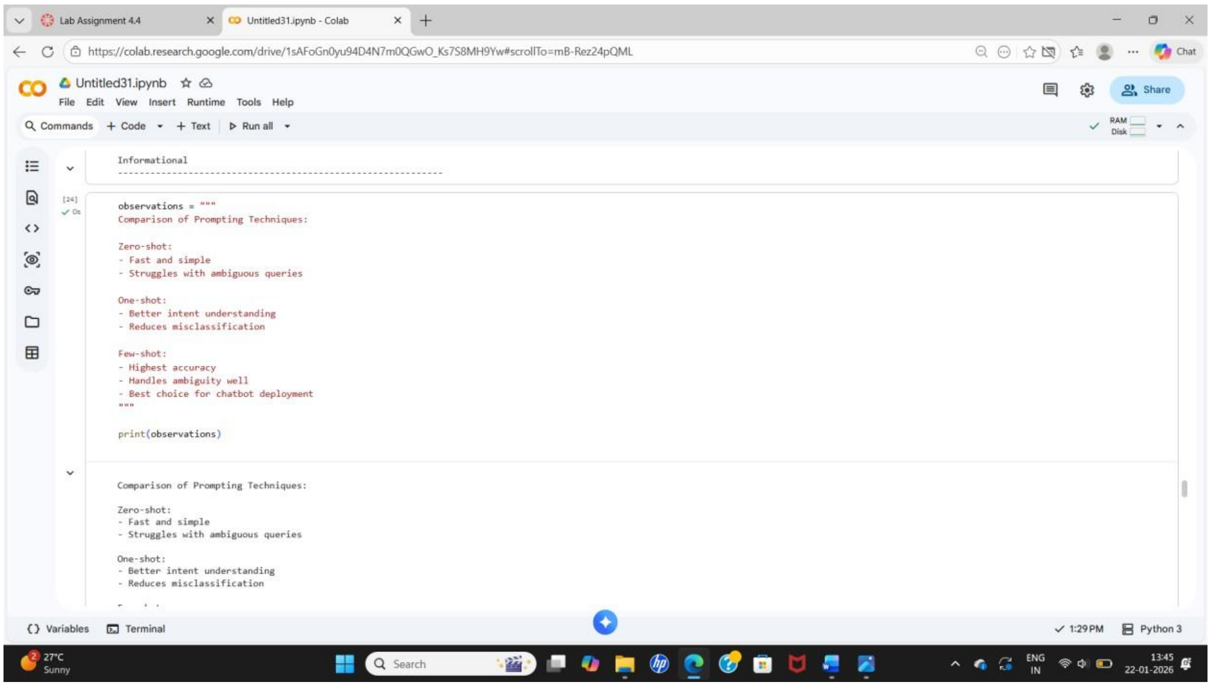
```
PROMPT:


Example:
Query: "Great service, I really liked the experience!"
Category: Feedback

Now classify the following query:
Query: "I want to cancel my order."


MODEL OUTPUT:

Transactional
------------------------------------------------------------
```

```
[23]
few_shot_prompt = """
Example 1:
Query: "What are your working hours?"
Category: Informational

Example 2:
Query: "Please update my delivery address."
Category: Transactional
```


Lab Assignment 4.4
Untitled31.ipynb - Colab
https://colab.research.google.com/drive/1sAFoGn0yu94D4N7m0QGwO_Ks7S8MH9Yw#scrollTo=mB-Rez24pQML
Untitled31.ipynb
File Edit View Insert Runtime Tools Help
Commands + Code + Text Run all
Share
Variables Terminal
1:29 PM Python 3
27°C Sunny
13:45 22-01-2026

```
[23]
Example 3:
Query: "My order arrived damaged."
Category: Complaint

Example 4:
Query: "Great service, I really liked the experience!"
Category: Feedback

Now classify the following query:
Query: "How can I reset my password?"
"""

show_prompt(few_shot_prompt, "Informational")
```

```
PROMPT:


Example 1:
Query: "What are your working hours?"
Category: Informational

Example 2:
Query: "Please update my delivery address."
Category: Transactional

Example 3:
Query: "My order arrived damaged."
Category: Complaint

Example 4:
Query: "Great service, I really liked the experience!"
Category: Feedback

Now classify the following query:
Query: "How can I reset my password?"
```


Lab Assignment 4.4
Untitled31.ipynb - Colab
https://colab.research.google.com/drive/1sAFoGn0yu94D4N7m0QGwO_Ks7S8MH9Yw#scrollTo=mB-Rez24pQML
Untitled31.ipynb
File Edit View Insert Runtime Tools Help
Commands + Code + Text Run all
Share
Variables Terminal
1:29 PM Python 3

```
Informational
------------------------------------------------------------
```

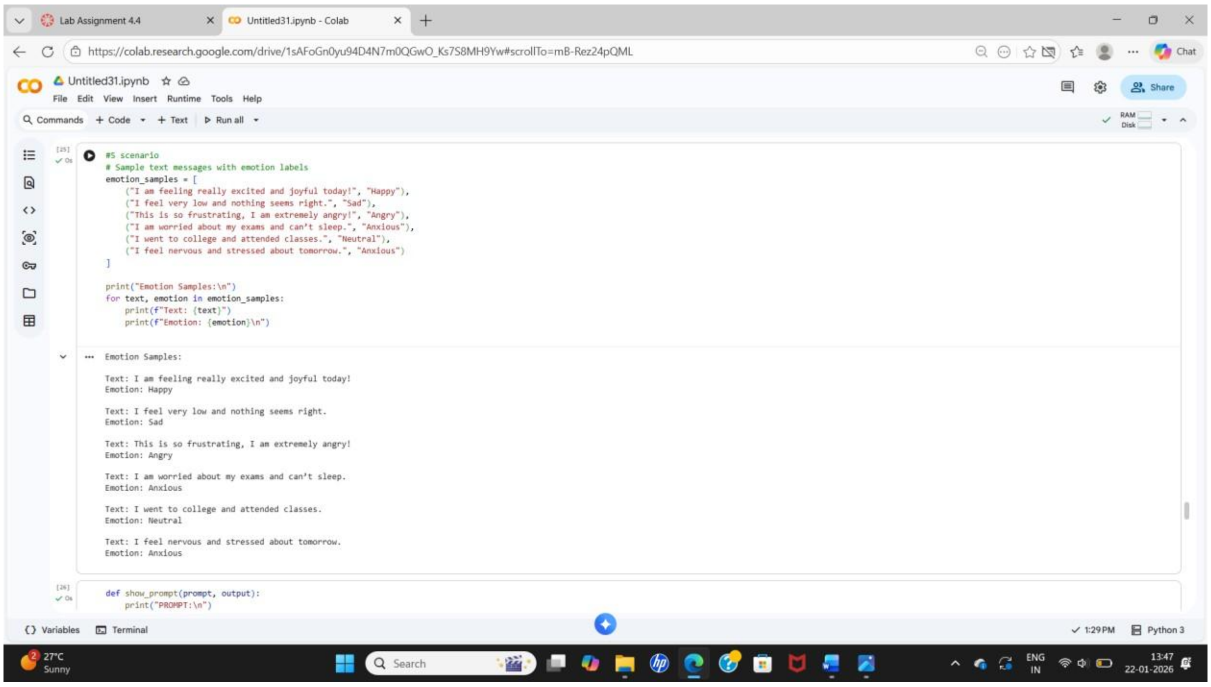
```
observations = """
Comparison of Prompting Techniques:

Zero-shot:
- Fast and simple
- Struggles with ambiguous queries

One-shot:
- Better intent understanding
- Reduces misclassification

Few-shot:
- Highest accuracy
- Handles ambiguity well
- Best choice for chatbot deployment
"""

print(observations)
```

```
Comparison of Prompting Techniques:

Zero-shot:
- Fast and simple
- Struggles with ambiguous queries

One-shot:
- Better intent understanding
- Reduces misclassification
```

FINAL CONCLUSION:

Few-shot prompting significantly improves chatbot question type detection by providing contextual examples, making it more robust and reliable than zero-shot and one-shot methods.

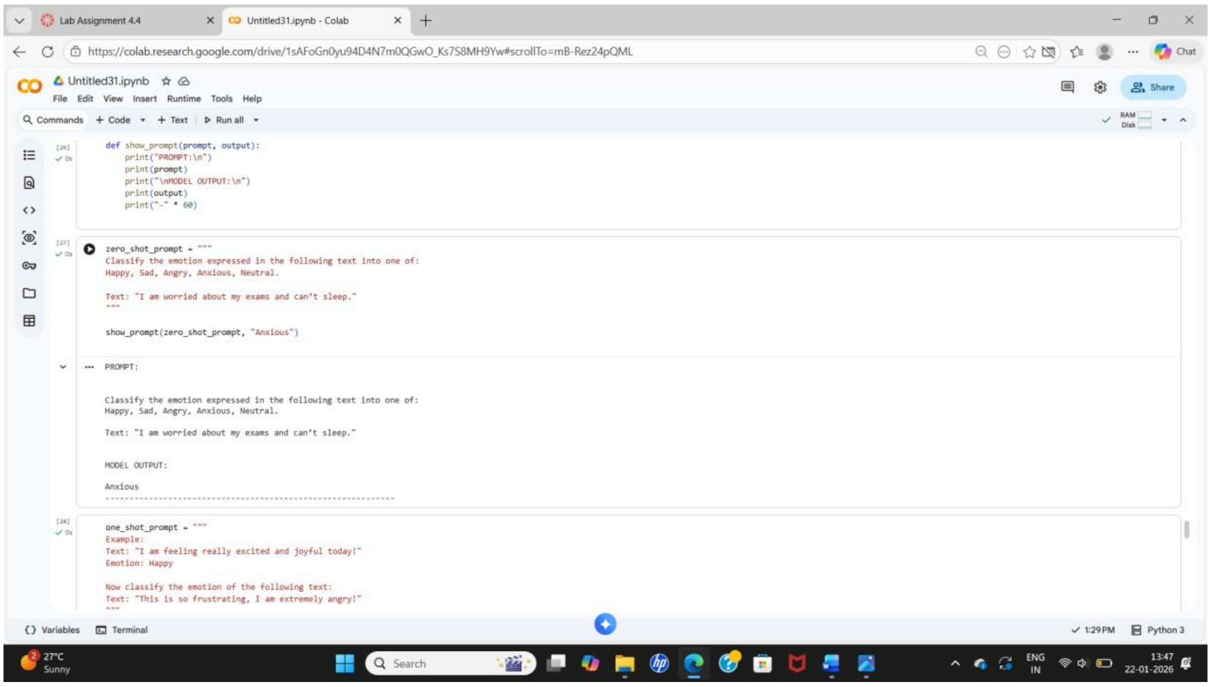
5.Scenario



```
#5 scenario
# Sample text messages with emotion labels
emotion_samples = [
    ("I am feeling really excited and joyful today!", "Happy"),
    ("I feel very low and nothing seems right.", "Sad"),
    ("This is so frustrating, I am extremely angry!", "Angry"),
    ("I am worried about my exams and can't sleep.", "Anxious"),
    ("I went to college and attended classes.", "Neutral"),
    ("I feel nervous and stressed about tomorrow.", "Anxious")
]

print("Emotion Samples:\n")
for text, emotion in emotion_samples:
    print(f"Text: {text}")
    print(f"Emotion: {emotion}\n")
```

```
Emotion Samples:

Text: I am feeling really excited and joyful today!
Emotion: Happy

Text: I feel very low and nothing seems right.
Emotion: Sad

Text: This is so frustrating, I am extremely angry!
Emotion: Angry

Text: I am worried about my exams and can't sleep.
Emotion: Anxious

Text: I went to college and attended classes.
Emotion: Neutral

Text: I feel nervous and stressed about tomorrow.
Emotion: Anxious
```

```
def show_prompt(prompt, output):
    print("PROMPT:\n")
```

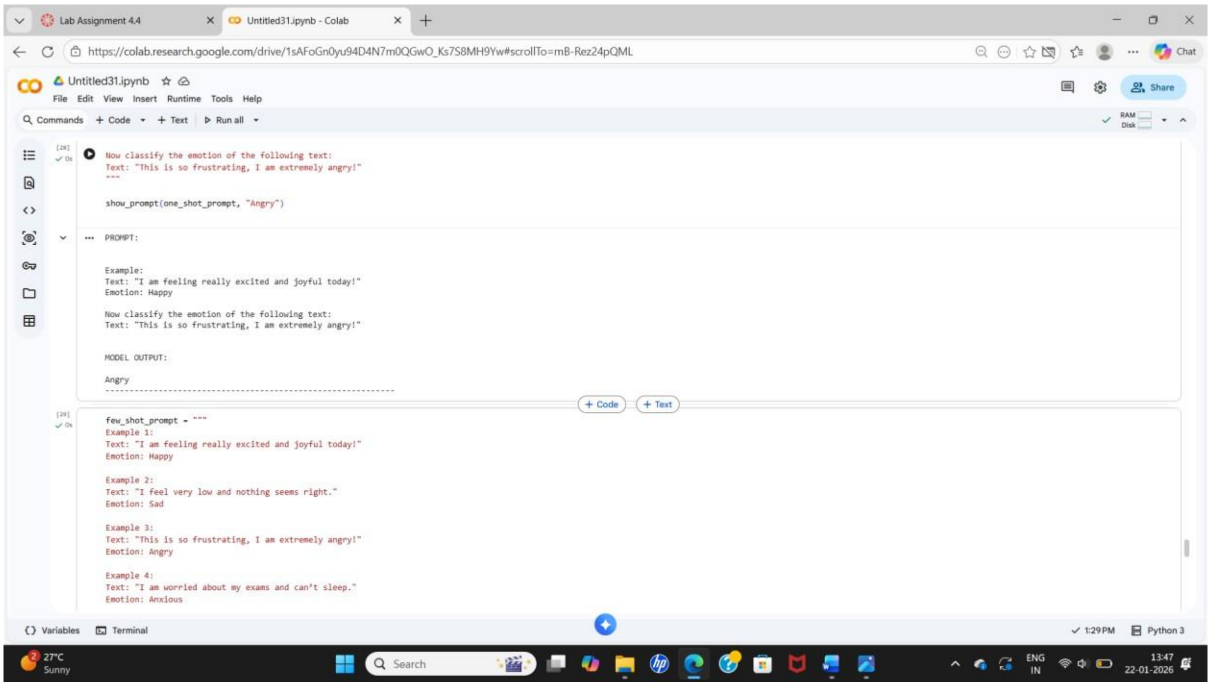


```
def show_prompt(prompt, output):
    print("PROMPT:\n")
    print(prompt)
    print("\nMODEL OUTPUT:\n")
    print(output)
    print("-" * 60)
```

```
zero_shot_prompt = """
Classify the emotion expressed in the following text into one of:
Happy, Sad, Angry, Anxious, Neutral.

Text: "I am worried about my exams and can't sleep."
"""

show_prompt(zero_shot_prompt, "Anxious")
```

```
PROMPT:


Classify the emotion expressed in the following text into one of:
Happy, Sad, Angry, Anxious, Neutral.

Text: "I am worried about my exams and can't sleep."


MODEL OUTPUT:

Anxious
------------------------------------------------------------
```

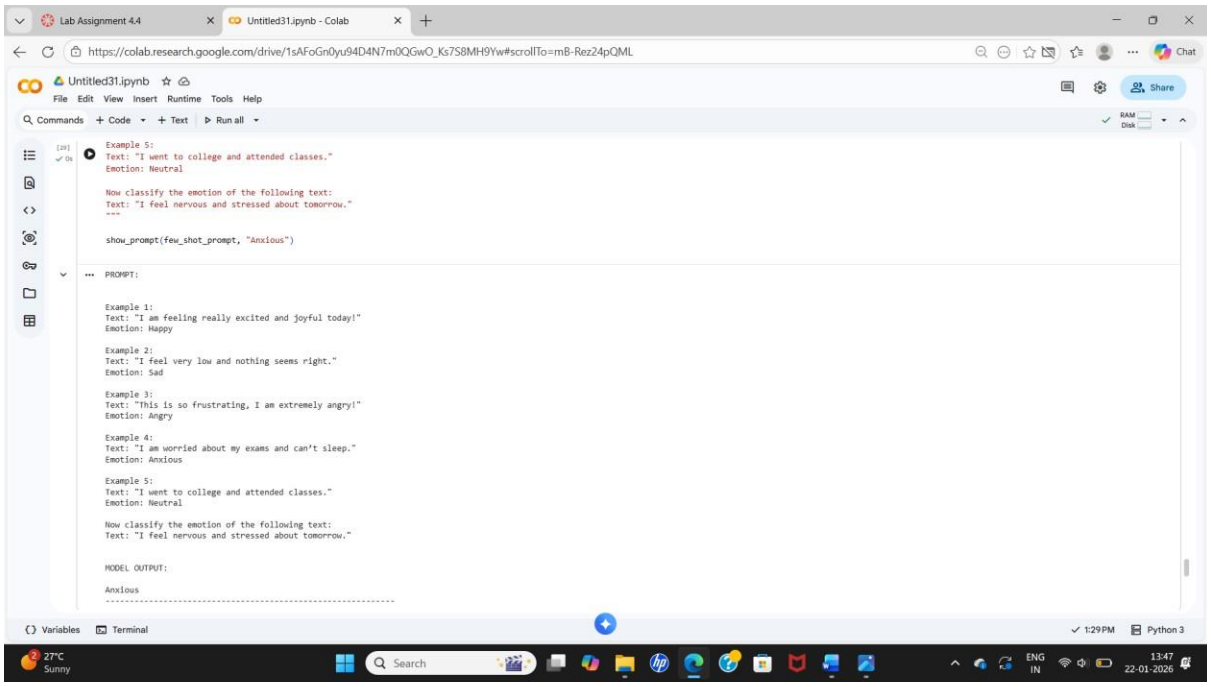
```
one_shot_prompt = """
Example:
Text: "I am feeling really excited and joyful today!"
Emotion: Happy

Now classify the emotion of the following text:
Text: "This is so frustrating, I am extremely angry!"
"""
```


Lab Assignment 4.4
Untitled31.ipynb - Colab
https://colab.research.google.com/drive/1sAFoGn0yu94D4N7m0QGwO_Ks7S8MH9Yw#scrollTo=mB-Rez24pQML
Untitled31.ipynb
File Edit View Insert Runtime Tools Help
Commands + Code + Text Run all
Share
Variables Terminal
1:29 PM Python 3
27°C Sunny
Search
ENG IN
13:47 22-01-2026

```
[28]
Now classify the emotion of the following text:
Text: "This is so frustrating, I am extremely angry!"
"""

show_prompt(one_shot_prompt, "Angry")
```

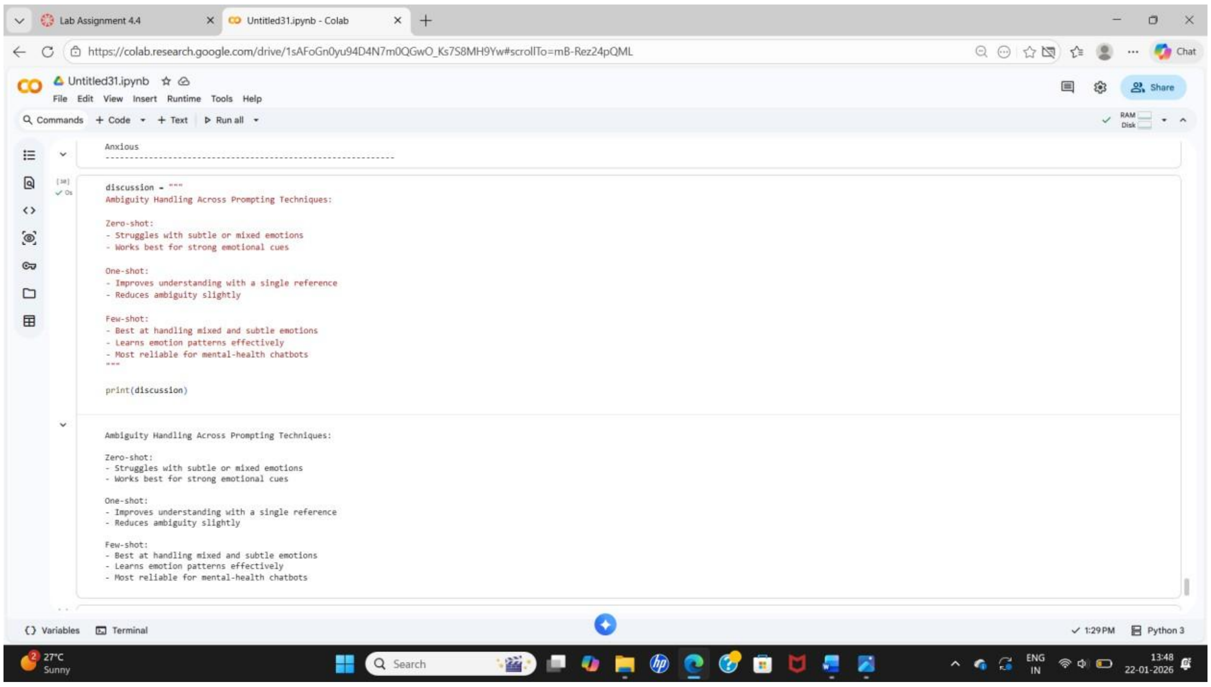
```
PROMPT:


Example:
Text: "I am feeling really excited and joyful today!"
Emotion: Happy

Now classify the emotion of the following text:
Text: "This is so frustrating, I am extremely angry!"


MODEL OUTPUT:

Angry
------------------------------------------------------------
```

```
[29]
few_shot_prompt = """
Example 1:
Text: "I am feeling really excited and joyful today!"
Emotion: Happy

Example 2:
Text: "I feel very low and nothing seems right."
Emotion: Sad

Example 3:
Text: "This is so frustrating, I am extremely angry!"
Emotion: Angry

Example 4:
Text: "I am worried about my exams and can't sleep."
Emotion: Anxious
```


Lab Assignment 4.4
Untitled31.ipynb - Colab
https://colab.research.google.com/drive/1sAFoGn0yu94D4N7m0QGwO_Ks7S8MH9Yw#scrollTo=mB-Rez24pQML
Untitled31.ipynb
File Edit View Insert Runtime Tools Help
Commands + Code + Text Run all
Share
Variables Terminal
1:29 PM Python 3
27°C Sunny
Search
ENG IN
13:47 22-01-2026

```
[29]
Example 5:
Text: "I went to college and attended classes."
Emotion: Neutral

Now classify the emotion of the following text:
Text: "I feel nervous and stressed about tomorrow."
"""

show_prompt(few_shot_prompt, "Anxious")
```

```
PROMPT:


Example 1:
Text: "I am feeling really excited and joyful today!"
Emotion: Happy

Example 2:
Text: "I feel very low and nothing seems right."
Emotion: Sad

Example 3:
Text: "This is so frustrating, I am extremely angry!"
Emotion: Angry

Example 4:
Text: "I am worried about my exams and can't sleep."
Emotion: Anxious

Example 5:
Text: "I went to college and attended classes."
Emotion: Neutral

Now classify the emotion of the following text:
Text: "I feel nervous and stressed about tomorrow."


MODEL OUTPUT:

Anxious
------------------------------------------------------------
```



```
Anxious
------------------------------------------------------------
```

```
discussion = """
Ambiguity Handling Across Prompting Techniques:

Zero-shot:
- Struggles with subtle or mixed emotions
- Works best for strong emotional cues

One-shot:
- Improves understanding with a single reference
- Reduces ambiguity slightly

Few-shot:
- Best at handling mixed and subtle emotions
- Learns emotion patterns effectively
- Most reliable for mental-health chatbots
"""

print(discussion)
```

```
Ambiguity Handling Across Prompting Techniques:

Zero-shot:
- Struggles with subtle or mixed emotions
- Works best for strong emotional cues

One-shot:
- Improves understanding with a single reference
- Reduces ambiguity slightly

Few-shot:
- Best at handling mixed and subtle emotions
- Learns emotion patterns effectively
- Most reliable for mental-health chatbots
```

FINAL CONCLUSION:

Few-shot prompting provides the highest accuracy in emotion detection because multiple labelled examples help the model distinguish subtle emotional differences, making it ideal for mental-health applications.