

1. Initial Markdown to JSON Conversion

- **Started** with a **.md** (Markdown) file containing student responses.
- **Copied Python code** from ChatGPT (me!) that reads the markdown file, parses it by numbered entries, and converts it into structured **JSON** format.
- **Used Google Colab** to run the provided Python code to process the **.md** file and create a clean **.json** file.

```
import re
import json

# Step 1: Load the Markdown file
with open('/content/Professor_1_Responses_Standardized.md', 'r', encoding='utf-8') as file:
    markdown_text = file.read()

# Step 2: Use regex to split responses by number + period (e.g., '1.', '2.', etc.)
# We'll capture both the student ID and their corresponding text
pattern = r'(\d+)\.s+(.*?)s*(?=(?:\d+\.|$))' # Match number, response, up until next number
matches = re.findall(pattern, markdown_text, re.DOTALL)

# Step 3: Build a list of dictionaries
responses = []
for student_id, response_text in matches:
    responses.append({
        "student_id": int(student_id),
        "response": response_text.strip()
    })

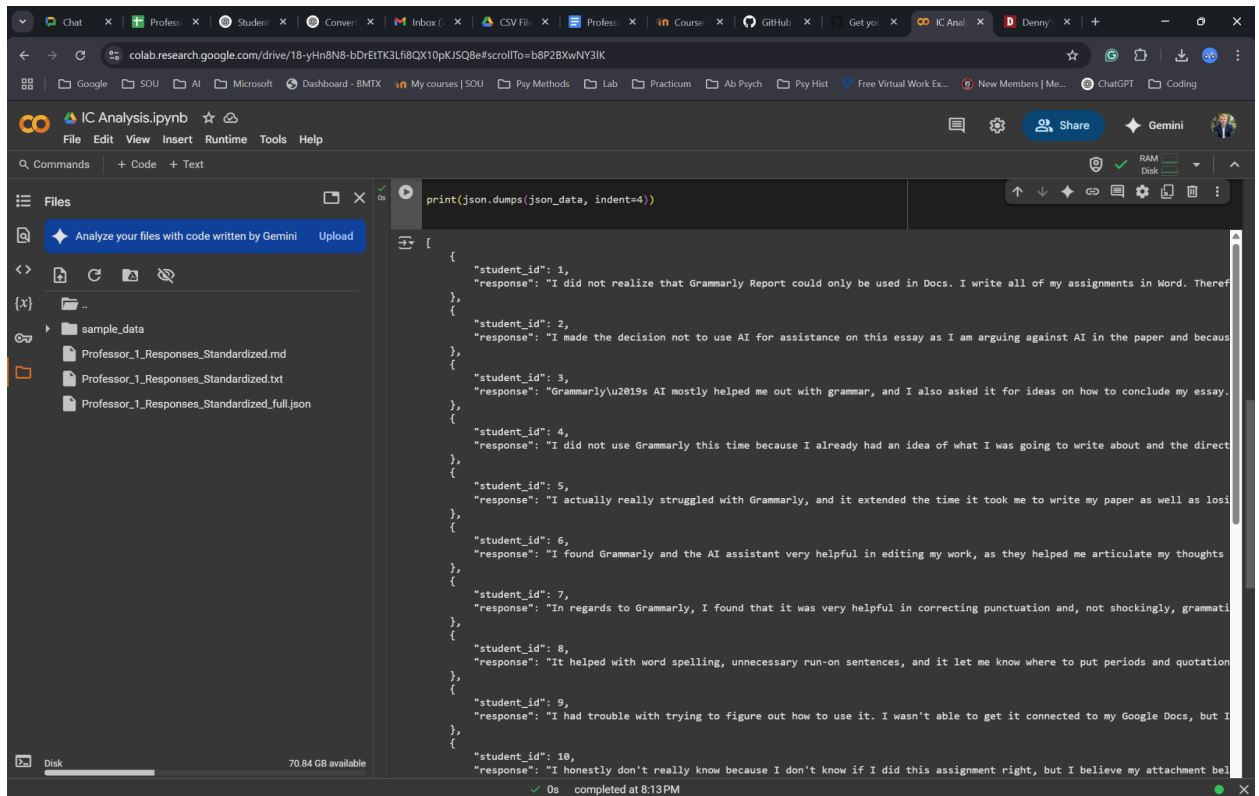
# Step 4: Save it to a JSON file
output_path = '/content/Professor_1_Responses_Standardized_full.json'
with open(output_path, 'w', encoding='utf-8') as json_file:
    json.dump(responses, json_file, indent=4, ensure_ascii=False)

print(f"Successfully saved {len(responses)} responses to {output_path}")
```

Successfully saved 38 responses to /content/Professor_1_Responses_Standardized_full.json

Generate display json output Close

1 of 1 Use code with caution 0s completed at 8:13 PM



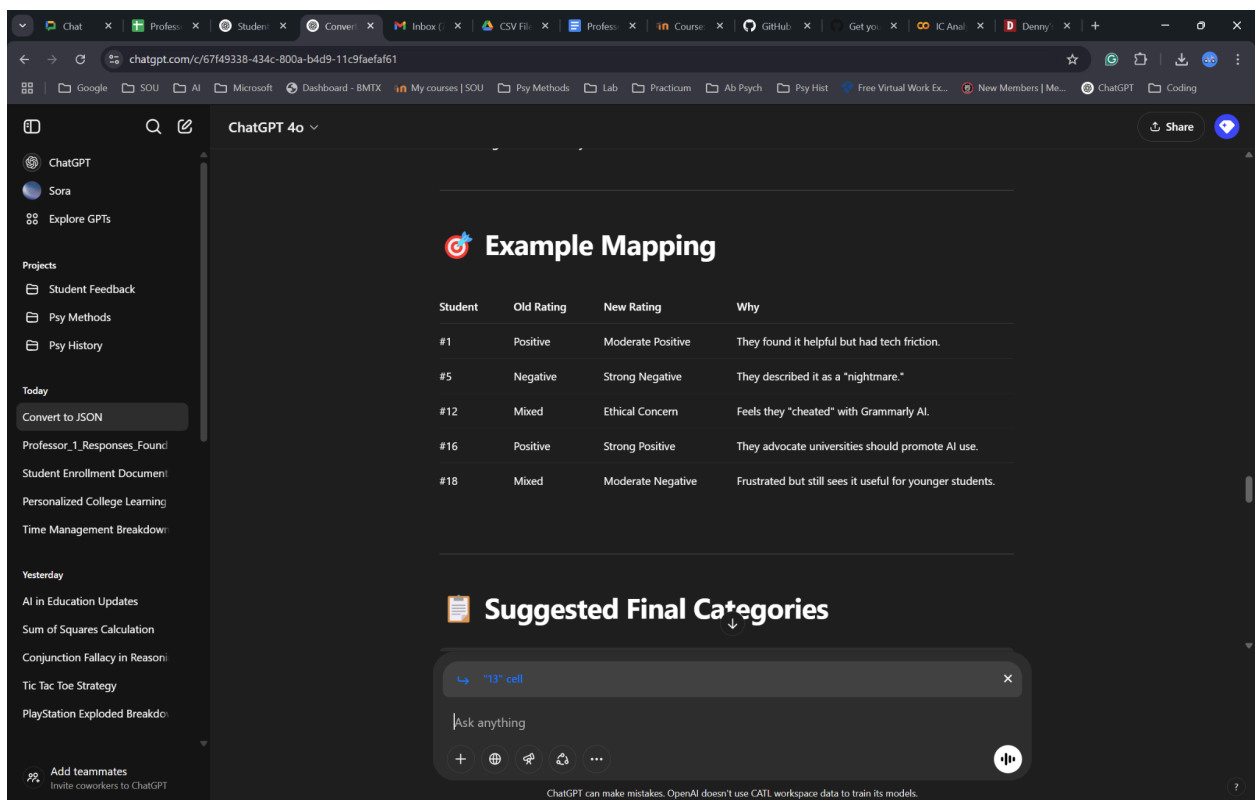
Colab is an online code editor from Google specifically designed for data analysis type work.
Link [🔗 IC Analysis.ipynb](https://colab.research.google.com/drive/18-yHn8N8-bDrETK3L68QX10pKJSQB8e#scrollTo=b8P2BXwNY3IK)

2. Sentiment Analysis and Classification

- Uploaded the JSON file to ChatGPT.
- Requested initial sentiment analysis using a simple three-category model: **Positive**, **Mixed**, or **Negative**.
- Reviewed and discussed how to improve the sentiment rating system to better capture intensity and ethical concerns.

3. Advanced Sentiment Analysis

- **Refined the sentiment model** to include six nuanced categories:
 - Strong Positive
 - Moderate Positive
 - Neutral / Unclear
 - Moderate Negative
 - Strong Negative
 - Ethical Concern



- **Ran new code** to reclassify all responses using this **more sophisticated sentiment system**.

Student Responses Advanced Sentiment Analysis

	student_id	response	sentiment_rating	justification	advanced_sentiment
1	1	I did not realize that Grammarly Report could only be used in Docs. I write all of my	Mixed	Student's response included both benefits and drawbacks without a clear	Moderate Positive
2	2	I made the decision not to use AI for assistance on this essay as I am	Mixed	Student noted both positive aspects (such as usefulness) and negative aspects	Moderate Positive
3	3	Grammarly's AI mostly helped me out with grammar, and I also asked it for ideas on how	Mixed	Student noted both positive aspects (such as usefulness) and negative aspects	Moderate Positive
4	4	I did not use Grammarly this time because I already had an idea of what I was	Mixed	Student noted both positive aspects (such as usefulness) and negative aspects	Moderate Positive
5	5	I actually really struggled with Grammarly, and it extended the time it took me to write	Mixed	Student noted both positive aspects (such as usefulness) and negative aspects	Strong Negative
6	6	I found Grammarly and the AI assistant very helpful in editing my work, as they	Mixed	Student noted both positive aspects (such as usefulness) and negative aspects	Strong Positive
7	7	In regards to Grammarly, I found that it was very helpful in correcting	Mixed	Student noted both positive aspects (such as usefulness) and negative aspects	Strong Positive
8	8	It helped with word spelling, unnecessary run-on sentences,	Mixed	Student noted both positive aspects (such as usefulness) and	Moderate Positive

student id, response and advanced sentiment columns please.

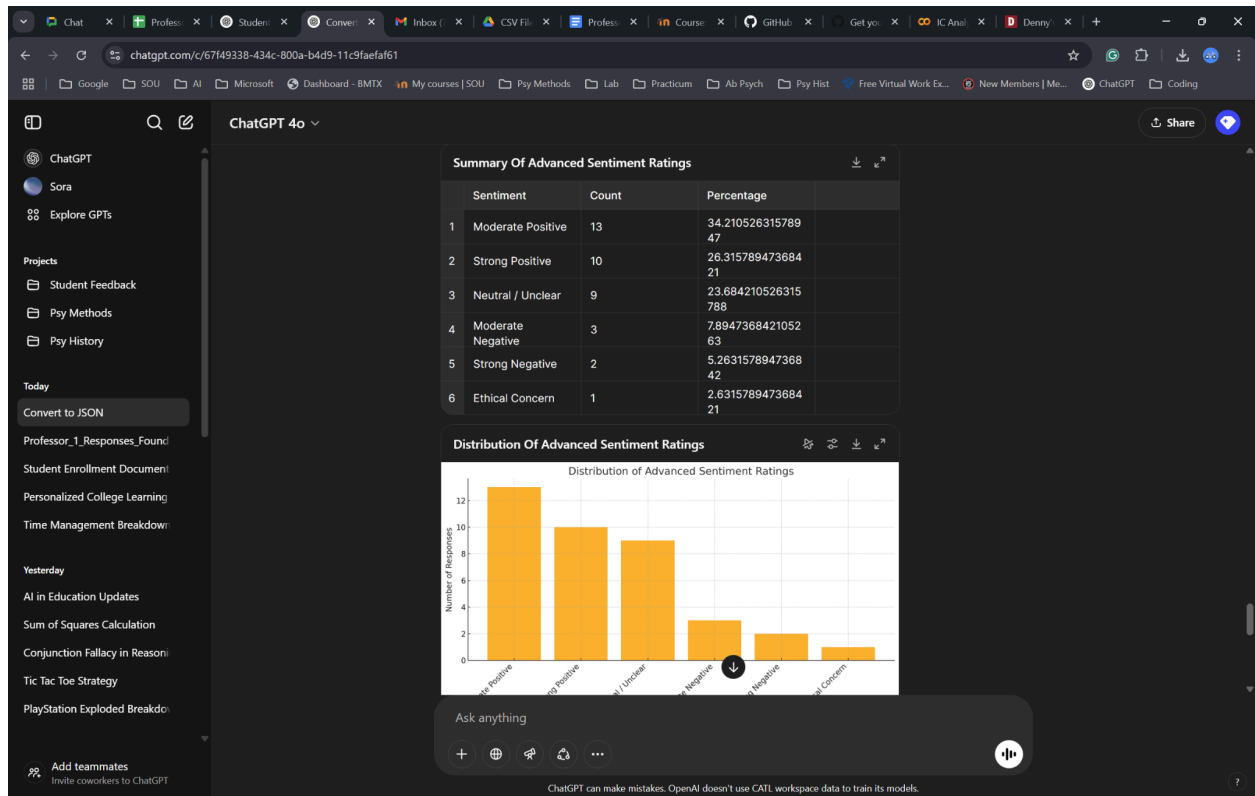
Here's the CSV file you asked for, containing the Student ID, Response, and Advanced Sentiment Rating:

[Download the CSV](#)

Let me know if you need any more formatting tweaks or summaries! [\[+\]](#)

Ask anything

- Generated a visual summary (bar chart) and data table summarizing the distribution of sentiments.



4. Data Export

- Created a cleaned CSV file containing only:
 - Student ID
 - Full Response
 - Advanced Sentiment Rating
- Downloaded the CSV from ChatGPT to your computer.

5. Post-Processing in Google Sheets

- Imported the CSV into Google Sheets.

- **Converted the imported data into a Table** for easier viewing and filtering.
- **Added a Chart** to visualize sentiment distribution more clearly
- **Enhanced usability** by:
 - Making the **Sentiment Rating column a Dropdown List** with predefined options.
 - **Applied color coding** to dropdown options to make manual sentiment verification and adjustments easier for humans (e.g., red for Strong Negative, green for Strong Positive, etc.).

Link to ChatGPT conversation. Images and files aren't available in shared links however.
<https://chatgpt.com/share/e/67f4a08e-1d78-800a-9536-eceebc903644>