Emotional Entries:

1. I love you

2. I reallly love going to physics class! I also really love when the physics professor makes us do a lot of boring work and then yells at us!

3. I saw my grandmother today. She's getting older, and I can see it more each time I visit. She held my hand and told me stories from her childhood, laughing like she was still that little girl. I don't think she realizes how much I cherish these moments. One day, I'll tell my kids about her, but for now, I just want to sit with her a little longer.

4. I was at a café today, just watching people come and go. It's funny how much you can learn from body language. There was a woman staring at her phone, biting her lip—bad news, maybe?

5. Why do people make things so much harder than they need to be? I spent all week preparing for this meeting, only for my manager to completely ignore half of what I said. I know I'm not imagining it—I work just as hard, but my ideas always get dismissed. Maybe it's time I stop playing nice and start making them listen.

6. I drove past my old high school today, and it hit me—how much time has passed, how much I've changed. I used to think those years were everything, like every decision was life or death. Now, I barely recognize the person I was back then. I wish I could go back and tell my younger self: It gets better. The things you're worried about now won't even matter in a few years.

7. "You know what? I think I'm finally getting my life together.

SamLowe
/
Roberta-base-go_emotions

**Research and select a suitable pre-trained emotion classification model.**
**Document your reasoning: why did you choose this model? What dataset was it trained**
**on? How many emotion classes does it support?**
I chose this model since I believed that it struck the best balance between performance and
extensive emotion coverage. This model was trained using the GoEmotions dataset from
Google and supports 28 different emotion classes.

Implement a pipeline that processes multiple journal entries, applies your selected model, and
returns structured emotion predictions for each entry.

Document and reflect.
For each prediction, assess whether the output emotions make sense. If not, speculate on
possible reasons for misclassification (e.g., ambiguous language, overlapping emotion
categories).

**Output Emotion Results and Observations**
Sentence 1 results:
 love: 0.9494
 admiration: 0.0300
 approval: 0.0183
 neutral: 0.0117
 joy: 0.0080
Output makes sense and is due to the clear and concise formulation of sentence.

Sentence 2 results:
love: 0.9265
 admiration: 0.0580
 joy: 0.0295
 annoyance: 0.0228
 neutral: 0.0218

Output doesn't make sense as this entry can be considered to be sarcastic. It seems the model
may not be able to pick up on sarcasm and as a result, incorrectly labels this emotion.

Sentence 3 results:

desire: 0.5925
 joy: 0.2186
 love: 0.1257
 neutral: 0.0580
 approval: 0.0463
Output seems to be relatively correct.

Sentence 4 results:
amusement: 0.9229
 joy: 0.1515
 curiosity: 0.1250
 confusion: 0.0371
 sadness: 0.0333
Output seems to also work as well.

Sentence 5 results:
disappointment: 0.3722
 annoyance: 0.3049
 neutral: 0.2027
 confusion: 0.1556
 curiosity: 0.0955

This sentence seems to have similarly equal scores of different negative emotions. This works.

Sentence 6 results:
desire: 0.6854
 neutral: 0.1112
 disappointment: 0.0829
 optimism: 0.0622
 realization: 0.0484

Output seems to be too general as the sentence more correlates with more complex emotions that the model cannot understand such as nostalgia.

Sentence 7 results:
excitement: 0.2549
 approval: 0.1878
 realization: 0.1382
 neutral: 0.1363
 joy: 0.1080

Output seems to not display a clear consensus of what emotions are at play. This may be due to overlapping emotional categories and possible ambiguous language.

Task 2:

Long Entries:
1. I've been thinking a lot about the choices I've made recently—how I left my old job for a new position that pays more but feels less fulfilling, and how I've drifted from friends who used to be my support system. Even though I've gained a sense of financial security, I can't ignore the lingering emptiness that comes from not following my passion. Today, I spent the morning tidying up my apartment, and in the quiet moments between folding clothes and wiping down counters, I realized how much I miss the sense of purpose my old projects gave me. I decided to call an old friend for a quick catch-up, and hearing their laughter made me wonder why I ever let those bonds slip away. In the afternoon, I tried to focus on my new responsibilities, but my mind kept returning to the idea that I'm living a life that looks good on paper yet feels hollow in practice. As the day wound down, I journaled about how I might reignite my creativity—perhaps by picking up painting again or volunteering for a local community program. Though I'm still uncertain about what comes next, acknowledging my dissatisfaction was strangely comforting. It reminded me that I can still change course, rediscover the relationships I've neglected, and find work that speaks to my heart instead of just my wallet.
2. Today was full of small ups and downs. I finally finished a book I'd been putting off, had a minor disagreement with a coworker about deadlines, and then took a quick walk to clear my head. A friendly chat in the evening reminded me how far I've come, and by bedtime, I felt more balanced than when I started.
3. Today, I took a moment to really appreciate everything I have. Life isn't perfect, and there are always challenges, but when I step back, I realize how lucky I am. I have a roof over my head, food on my table, and people who care about me. It's so easy to focus on what's missing or what's going wrong, but today, I chose to focus on what's right. I went for a walk and felt grateful for the fresh air, the warmth of the sun, and even the little things—like my favorite song playing at just the right moment. I had a good conversation with a friend, which reminded me how important it is to have people who listen and support you. Even the small moments, like enjoying a quiet cup of coffee, felt more meaningful. Life moves so fast, and I don't always take the time to appreciate what I already have, but today, I did—and it felt good.


**Research and select a summarization model.**
**Compare available models and select one that you believe best suits the journaling context. Document why you chose this model.**
facebook/bart-large-cnn. I chose this model since BART is particularly effective for text generation (summarization, etc.) and comprehension tasks. The model is also quite popular with 8 million downloads last month alone.


**Evaluate the summaries.**

**For each output, manually assess how well it represents the original entry. Are key points retained? Is the emotional tone preserved? Provide at least 3 examples of both strong and weak summaries, along with your analysis.**

Summary 1: The balance of exercise, social interaction, and productivity left me feeling calm and satisfied. Today was a productive day. In the afternoon, I organized my work files and planned for the upcoming week.

Observation: The model seems to be drawing topic sentences from the entries. It also seems to gauge that the entry is positive and includes the sentences that stress a positive outlook. Passable summary.

Summary 2: Today was full of small ups and downs. I finally finished a book I'd been putting off. I had a minor disagreement with a coworker about deadlines. I took a quick walk to clear my head. A friendly chat.

Observation: The model seems to summarize the start of the entry but fails to include the important sentences in the entry that stress the idea of how the subject began to feel better by nighttime. Weak summary.

Summary 3: Today, I took a moment to really appreciate everything I have. I have a roof over my head, food on my table, and people who care about me. Even the small moments, like enjoying a quiet cup of coffee, felt.
Observation: The model seems to have been able to capture the main idea of the entry, however the summary seems to have been cut off due to the length parameters. The model is unable to tweak sentences to fit these parameters and just copy pastes important sentences. The model is not complex enough to formulate its own sentences.