Demo Use-Case 3 – Sentiment Analysis Using

SQLite + OpenAI

Step 1 — Create a Review Table

```
CREATE TABLE PRODUCT_REVIEWS (

   id INTEGER,

review_text TEXT

);



INSERT INTO PRODUCT_REVIEWS VALUES

(1, 'The product quality is amazing, I absolutely loved it!'),

(2, 'Terrible experience. Nothing worked as expected.'),

(3, 'It was okay, not great, not terrible.'),

(4, 'The packaging was damaged but customer support helped quickly.');
```

Step 2 — Run Sentiment Analysis (Basic Test)

Just test the function:

```
SELECT OPENAI_SENTIMENT('This is a sample review') AS
sentiment_score;
```

Output example:

```
0.82  → positive
-0.77 → negative
0.00  → neutral
```

Step 3 — Apply Sentiment Analysis on Full Table

```
SELECT
   id,
   review_text,
OPENAI_SENTIMENT(review_text) AS sentiment_score
FROM PRODUCT_REVIEWS;
```

Step 4 — Categorize Results (Positive/Neutral/Negative)

```
SELECT
   id,
   review_text,
OPENAI_SENTIMENT(review_text) AS score,
   CASE
WHEN OPENAI_SENTIMENT(review_text) > 0.3 THEN 'Positive'
WHEN OPENAI_SENTIMENT(review_text) < -0.3 THEN 'Negative'
      ELSE 'Neutral'
   END AS sentiment_label
FROM PRODUCT_REVIEWS;
```

Step 5 — Compute Average Sentiment

```
SELECT AVG(OPENAI_SENTIMENT(review_text)) AS avg_sentiment

FROM PRODUCT_REVIEWS;
```

Step 6 — Group Sentiment by Category

```
SELECT
   CASE
WHEN OPENAI_SENTIMENT(review_text) > 0.3 THEN 'Positive'
WHEN OPENAI_SENTIMENT(review_text) < -0.3 THEN 'Negative'
      ELSE 'Neutral'
   END AS sentiment_group,
   COUNT(*) AS total
FROM PRODUCT_REVIEWS
GROUP BY 1;
```