Sentiment Analysis and Reaction Insights Sql Queries
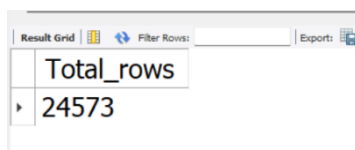
CREATE DATABASE IF NOT EXISTS reactions_db;

USE reactions_db;

CREATE TABLE reactions (

   SNO INT PRIMARY KEY,

   ContentID VARCHAR(255) NOT NULL,

   ReactionType VARCHAR(50) NOT NULL,

   Datetime DATETIME NOT NULL,

   ContentType VARCHAR(50) NOT NULL,

   Category VARCHAR(50) NOT NULL,

   Sentiment VARCHAR(50) NOT NULL,

   Score INT CHECK (Score >= 0)

);

SELECT * FROM reactions;

select count(*) from reactions;

Total_rows
24573

1. Find the Top 5 Content Categories by Popularity

SELECT Category, SUM(Score) AS Total_Popularity

FROM reactions

GROUP BY Category

ORDER BY Total_Popularity DESC

LIMIT 5;

2. Find the Number of Unique Content Categories

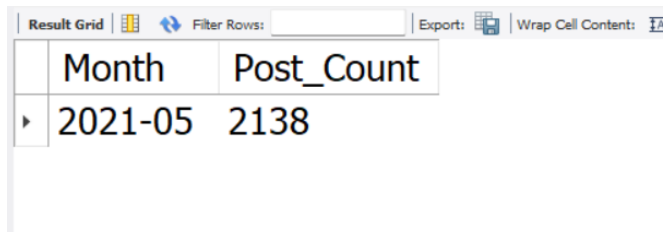SELECT COUNT(DISTINCT Category) AS Unique_Categories

FROM reactions;

3. Find the Total Reactions for the Most Popular Category

SELECT Category, SUM(Score) AS Total_Reactions

FROM reactions

WHERE Category = (

   SELECT Category

   FROM reactions

   GROUP BY Category

   ORDER BY SUM(Score) DESC

   LIMIT 1

)

GROUP BY Category;

4. Find the Month with the Most Posts

SELECT DATE_FORMAT(Datetime, '%Y-%m') AS Month, COUNT(ContentID) AS Post_Count

FROM reactions
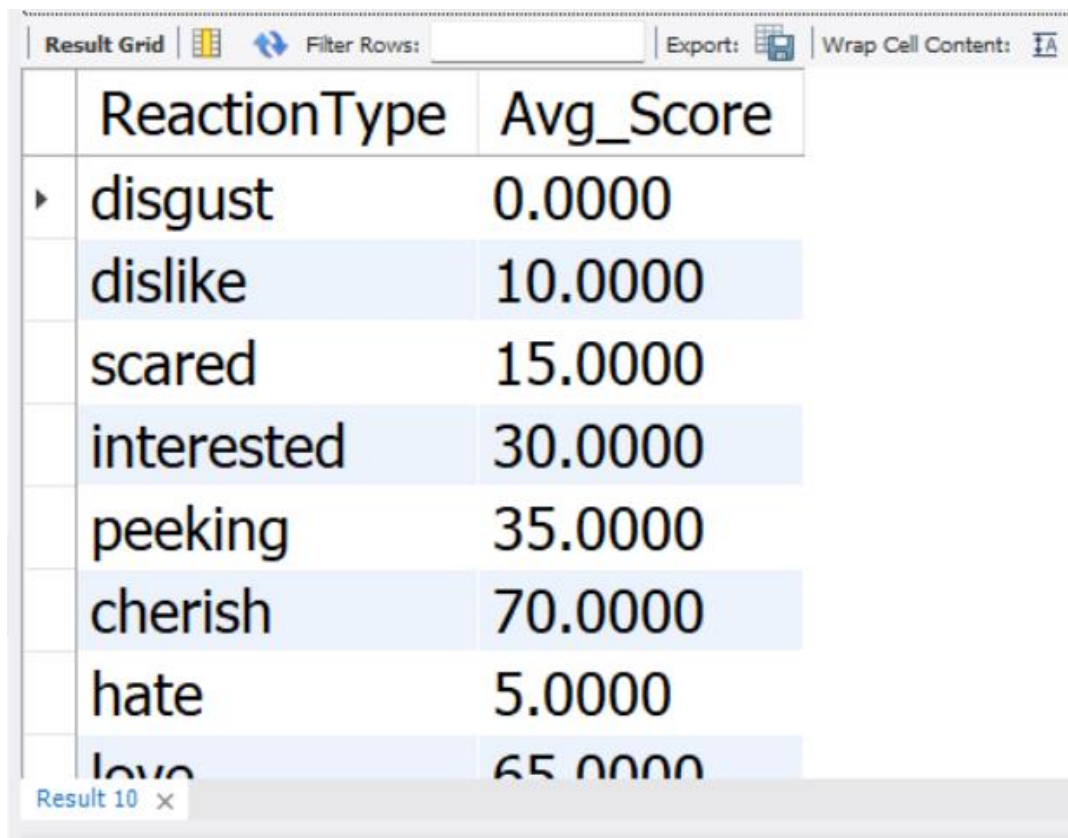
GROUP BY Month

ORDER BY Post_Count DESC

LIMIT 1;

Month	Post_Count
2021-05	2138

5. Find the Average Score for Each Reaction Type

SELECT ReactionType, AVG(Score) AS Avg_Score

FROM reactions

GROUP BY ReactionType;
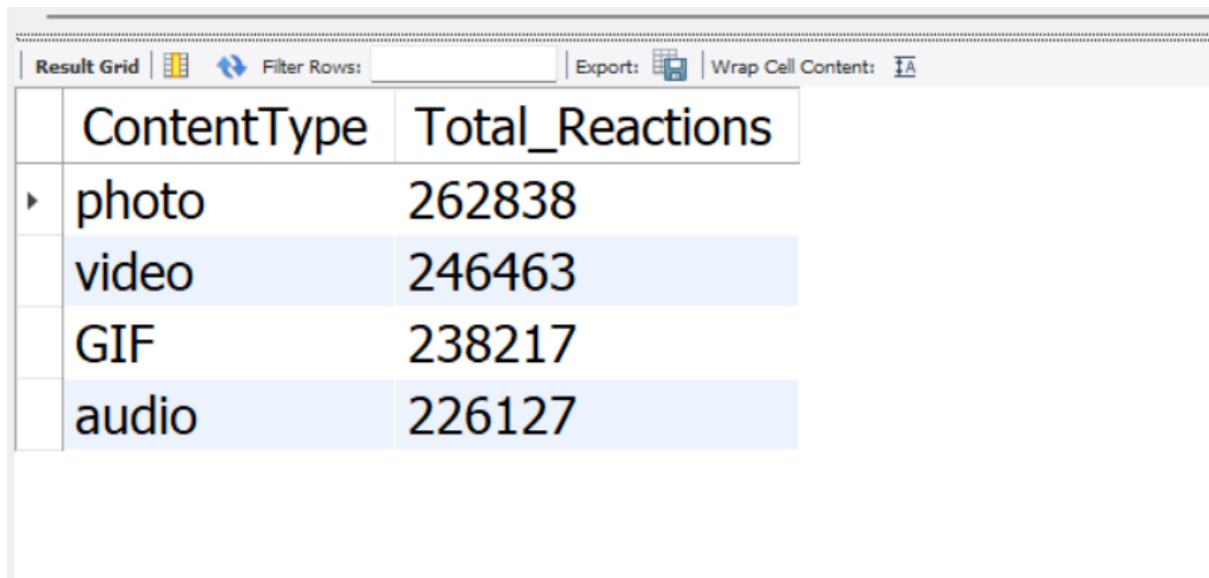
ReactionType	Avg_Score
disgust	0.0000
dislike	10.0000
scared	15.0000
interested	30.0000
peeking	35.0000
cherish	70.0000
hate	5.0000
love	65.0000

6. Find the Total Reactions Per Content Type

SELECT ContentType, SUM(Score) AS Total_Reactions

FROM reactions

GROUP BY ContentType;

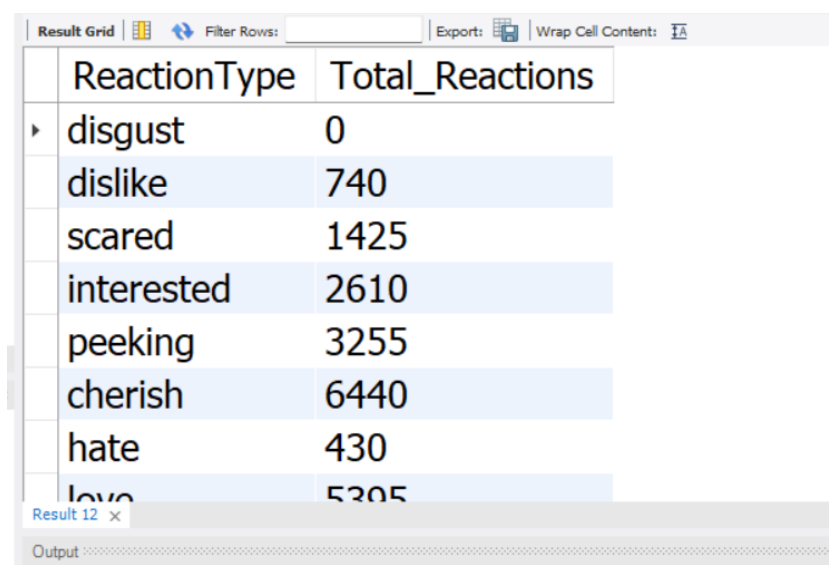| ContentType	Total_Reactions
photo	262838
video	246463
GIF	238217
audio	226127

7. Find the Number of Reactions for Each Reaction Type in a Specific Category

SELECT ReactionType, SUM(Score) AS Total_Reactions

FROM reactions

WHERE Category = 'Studying'

GROUP BY ReactionType;

ReactionType	Total_Reactions
disgust	0
dislike	740
scared	1425
interested	2610
peeking	3255
cherish	6440
hate	430
love	5395

Result 12 ×

Output

8. Find the Category with the Highest Average Score

SELECT Category, AVG(Score) AS Avg_Score

FROM reactions

GROUP BY Category

ORDER BY Avg_Score DESC

LIMIT 1;

Category	Avg_Score
technology	40.4817

9. Count the Number of Reactions for Each Month

SELECT DATE_FORMAT(Datetime, '%Y-%m') AS Month, COUNT(ContentID) AS Post_Count

FROM reactions

GROUP BY Month;

Month	Post_Count
2020-11	2034
2021-06	1129
2021-04	1974
2021-01	2126
2020-08	2114
2020-12	2092
2020-10	2056
2020-09	2022
2021-02	1914
2021-05	2138

Result 14 ×

10. Find the Top 3 Categories with the Highest Total Score in a Specific Time Period

SELECT Category, SUM(Score) AS Total_Score

FROM reactions

WHERE Datetime BETWEEN '2020-01-01' AND '2021-12-31'

GROUP BY Category

ORDER BY Total_Score DESC

LIMIT 3;

Category	Total_Score
Animals	74965
science	71168
healthy eating	69339