## Which is the leading brand in the Dips & Salsa category?

https://console.cloud.google.com/bigquery?sq=1084805749063:bacb27c54e06466aa3b0397dfaba861e

```
WITH brand_metrics AS (
SELECT
  p.BRAND,
  COUNT(DISTINCT t.RECEIPT_ID) as receipt_count,
   SUM(SAFE_CAST(NULLIF(TRIM(t.FINAL_SALE), '') AS NUMERIC)) as total_sales,
  ROUND(AVG(SAFE_CAST(NULLIF(TRIM(t.FINAL_SALE), '') AS NUMERIC)),2) as
avg_sale_amount
FROM `Fetch.TRANSACTION` t
JOIN `Fetch.PRODUCTS` p
  ON t.BARCODE = p.BARCODE
WHERE
   (p.CATEGORY_1 = 'Dips & Salsa' OR
   p.CATEGORY_2 = 'Dips & Salsa' OR
   p.CATEGORY_3 = 'Dips & Salsa')
  AND p.BRAND IS NOT NULL
GROUP BY 1
)
SELECT
RANK() OVER (ORDER BY total_sales DESC) as sales_rank,
RANK() OVER (ORDER BY receipt_count DESC) as receipt_rank,
FROM brand_metrics
ORDER BY total_sales DESC
LIMIT 5;
```

BRAND	receipt_count	total_sales	avg_sale_amo unt	sales_rank	receipt_rank
TOSTITOS	36	260.99	5.02	1	1
GOOD FOODS	9	118.89	10.81	2	10
PACE	24	118.58	3.49	3	2
MARKETSIDE	16	103.29	4.13	4	5
FRITOS	19	91.73	3.53	5	3

## What are the top 5 brands by receipts scanned among users 21 and over?

https://console.cloud.google.com/bigquery?sq=1084805749063:3437f4e278fe4b9696966314cf94cd57

```
WITH user_age AS (
SELECT
   ID,
   DATE_DIFF(DATE('2024-09-08'), DATE(BIRTH_DATE), YEAR) as age
FROM `Fetch.USER`
WHERE BIRTH_DATE IS NOT NULL
SELECT
p.BRAND,
COUNT(DISTINCT t.RECEIPT_ID) as receipt_count,
COUNT(DISTINCT t.USER_ID) as unique_users,
COUNT(*) as total_transactions
FROM `Fetch.TRANSACTION` t
JOIN `Fetch.PRODUCTS` p
ON t.BARCODE = p.BARCODE
JOIN user_age u
ON t.USER_ID = u.ID
WHERE
u.age >= 21
AND p.BRAND IS NOT NULL
GROUP BY p.BRAND
ORDER BY receipt_count DESC
LIMIT 5:
```

BRAND	total_sales	receipt_count	unique_users
CVS	72	1	1
TRIDENT	46.72	2	1
DOVE	42.88	3	3
COORS LIGHT	34.96	1	1
AXE	15.98	1	1

## What are the top 5 brands by sales among users that have had their account for at least six months?

https://console.cloud.google.com/bigquery?sq=1084805749063:e88b059d54644ce0aacd407701dfae20

```
WITH eligible_users AS (
SELECT ID
FROM `Fetch.USER`
WHERE DATE(CREATED_DATE) <= DATE_SUB(DATE('2024-09-08'), INTERVAL 6 MONTH)
SELECT
 p.BRAND,
SUM(SAFE_CAST(NULLIF(TRIM(t.FINAL_SALE), '') AS NUMERIC)) as total_sales,
COUNT(DISTINCT t.RECEIPT_ID) as receipt_count,
COUNT(DISTINCT t.USER_ID) as unique_users
FROM `Fetch.TRANSACTION` t
JOIN `Fetch.PRODUCTS` p
ON t.BARCODE = p.BARCODE
JOIN eligible_users u
ON t.USER_ID = u.ID
WHERE p.BRAND IS NOT NULL
GROUP BY p.BRAND
ORDER BY total_sales DESC
LIMIT 5;
```

BRAND	receipt_count	unique_users	total_transactio
NERDS CANDY	3	1	6
DOVE	3	3	6
TRIDENT	2	1	4
MEIJER	2	2	4
COCA-COLA	2	2	4