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

code - SELECT

CLEANPRODUCTS\_TAKEHOME.BRAND, -- Fetch the brand

COUNT(CLEANTRANSACTION\_TAKEHOME.RECEIPT\_ID) AS RECEIPT\_COUNT -- Count the number of receipts scanned

FROM

`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANUSER\_TAKEHOME` AS CLEANUSER\_TAKEHOME

INNER JOIN

`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANTRANSACTION\_TAKEHOME` AS CLEANTRANSACTION\_TAKEHOME

ON

CLEANUSER\_TAKEHOME.ID = CLEANTRANSACTION\_TAKEHOME.USER\_ID -- Join on user ID

INNER JOIN

`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANPRODUCTS\_TAKEHOME` AS CLEANPRODUCTS\_TAKEHOME

ON

CLEANTRANSACTION\_TAKEHOME.BARCODE = CLEANPRODUCTS\_TAKEHOME.BARCODE -- Join on barcode

WHERE

EXTRACT(YEAR FROM CURRENT\_DATE()) - EXTRACT(YEAR FROM CLEANUSER\_TAKEHOME.BIRTH\_DATE) >= 21 -- Users 21 years or older

GROUP BY

CLEANPRODUCTS\_TAKEHOME.BRAND -- Group by brand

ORDER BY

RECEIPT\_COUNT DESC -- Sort by the number of receipts scanned

LIMIT 5; -- Limit to the top 5 brands

A screenshot of a computer

AI-generated content may be incorrect.

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

**code - SELECT**

**CLEANPRODUCTS\_TAKEHOME.BRAND, -- Fetch the brand**

**SUM(CLEANTRANSACTION\_TAKEHOME.FINAL\_SALE) AS TOTAL\_SALES -- Calculate total sales**

**FROM**

**`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANUSER\_TAKEHOME` AS CLEANUSER\_TAKEHOME**

**INNER JOIN**

**`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANTRANSACTION\_TAKEHOME` AS CLEANTRANSACTION\_TAKEHOME**

**ON**

**CLEANUSER\_TAKEHOME.ID = CLEANTRANSACTION\_TAKEHOME.USER\_ID -- Join on user ID**

**INNER JOIN**

**`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANPRODUCTS\_TAKEHOME` AS CLEANPRODUCTS\_TAKEHOME**

**ON**

**CLEANTRANSACTION\_TAKEHOME.BARCODE = CLEANPRODUCTS\_TAKEHOME.BARCODE -- Join on barcode**

**WHERE**

**DATE\_DIFF(CURRENT\_DATE(), DATE(CLEANUSER\_TAKEHOME.CREATED\_DATE), MONTH) >= 6 -- Cast CREATED\_DATE to DATE and compare**

**GROUP BY**

**CLEANPRODUCTS\_TAKEHOME.BRAND -- Group by brand**

**ORDER BY**

**TOTAL\_SALES DESC -- Sort by total sales in descending order**

**LIMIT 5; -- Limit to the top 5 brands**

**A screenshot of a data

AI-generated content may be incorrect.**

* What is the percentage of sales in the Health & Wellness category by generation?

code - WITH Generations AS (

SELECT

ID AS USER\_ID,

CASE

WHEN EXTRACT(YEAR FROM BIRTH\_DATE) BETWEEN 1946 AND 1964 THEN 'Baby Boomers'

WHEN EXTRACT(YEAR FROM BIRTH\_DATE) BETWEEN 1965 AND 1980 THEN 'Generation X'

WHEN EXTRACT(YEAR FROM BIRTH\_DATE) BETWEEN 1981 AND 1996 THEN 'Millennials'

WHEN EXTRACT(YEAR FROM BIRTH\_DATE) BETWEEN 1997 AND 2012 THEN 'Generation Z'

ELSE 'Unknown'

END AS GENERATION

FROM

`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANUSER\_TAKEHOME`

WHERE

BIRTH\_DATE IS NOT NULL

),

CategorySales AS (

SELECT

G.GENERATION,

'Health & Wellness' AS CATEGORY, -- Focus on the "Health & Wellness" category

SUM(T.FINAL\_SALE) AS TOTAL\_SALES,

SUM(CASE

WHEN 'Health & Wellness' IN (P.CATEGORY\_1, P.CATEGORY\_2, P.CATEGORY\_3)

THEN T.FINAL\_SALE ELSE 0 END) AS HEALTH\_WELLNESS\_SALES

FROM

`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANUSER\_TAKEHOME` AS U

JOIN

`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANTRANSACTION\_TAKEHOME` AS T

ON

U.ID = T.USER\_ID

JOIN

`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANPRODUCTS\_TAKEHOME` AS P

ON

T.BARCODE = P.BARCODE

JOIN

Generations AS G

ON

U.ID = G.USER\_ID

GROUP BY

G.GENERATION

)

SELECT

GENERATION,

CATEGORY,

TOTAL\_SALES,

HEALTH\_WELLNESS\_SALES,

ROUND((HEALTH\_WELLNESS\_SALES / TOTAL\_SALES) \* 100, 2) AS PERCENTAGE\_HEALTH\_WELLNESS\_SALES

FROM

CategorySales

ORDER BY

PERCENTAGE\_HEALTH\_WELLNESS\_SALES, GENERATION ASC;

**A screenshot of a computer

AI-generated content may be incorrect.**

* Who are Fetch’s power users?

code - SELECT

U.ID AS USER\_ID, -- User ID from CLEANUSER\_TAKEHOME

COUNT(T.RECEIPT\_ID) AS TRANSACTION\_COUNT, -- Total number of transactions

SUM(T.FINAL\_SALE) AS TOTAL\_SPENDING -- Total spending

FROM

`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANUSER\_TAKEHOME` AS U

JOIN

`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANTRANSACTION\_TAKEHOME` AS T

ON

U.ID = T.USER\_ID

GROUP BY

U.ID

ORDER BY

TOTAL\_SPENDING DESC, -- Order by highest spending first

TRANSACTION\_COUNT DESC -- Break ties by transaction count

LIMIT 10; -- Top 10 users

A screenshot of a data sheet

AI-generated content may be incorrect.

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

code - SELECT

P.BRAND, -- Brand name

SUM(T.FINAL\_SALE) AS TOTAL\_SALES -- Total sales for the brand

FROM

`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANTRANSACTION\_TAKEHOME` AS T

JOIN

`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANPRODUCTS\_TAKEHOME` AS P

ON

T.BARCODE = P.BARCODE -- Match transactions with product details

WHERE

'Dips & Salsa' IN (P.CATEGORY\_1, P.CATEGORY\_2, P.CATEGORY\_3) -- Check in all category fields

GROUP BY

P.BRAND -- Group sales by brand

ORDER BY

TOTAL\_SALES DESC -- Rank brands by total sales

LIMIT 1; -- Select the top brand

A screenshot of a computer

AI-generated content may be incorrect.

* At what percent has Fetch grown year over year?

code - WITH YearlySales AS (

SELECT

EXTRACT(YEAR FROM PURCHASE\_DATE) AS YEAR,

SUM(FINAL\_SALE) AS TOTAL\_SALES

FROM

`simple-twitter-bot-with-python.FETCHAPROJECT.CLEANTRANSACTION\_TAKEHOME`

WHERE

PURCHASE\_DATE IS NOT NULL

GROUP BY

YEAR

ORDER BY

YEAR

)

SELECT

YEAR,

TOTAL\_SALES,

LAG(TOTAL\_SALES) OVER (ORDER BY YEAR) AS PREVIOUS\_YEAR\_SALES,

ROUND((TOTAL\_SALES - LAG(TOTAL\_SALES) OVER (ORDER BY YEAR))

/ LAG(TOTAL\_SALES) OVER (ORDER BY YEAR) \* 100, 2) AS YOY\_GROWTH

FROM

YearlySales;

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AI-generated content may be incorrect.