**Second: Provide SQL queries**

**Closed-ended questions:**

1. **Top 5 brands by receipts scanned among users 21 and over ?**

SELECT TOP 5 p.BRAND, COUNT(t.RECEIPT\_ID) AS Receipt\_count

FROM TRANSACTIONS t

JOIN USERS u ON t.USER\_ID = u.ID

JOIN PRODUCTS p ON t.BARCODE = p.BARCODE

WHERE u.AGE >= 21

AND BRAND IS NOT NULL

AND BRAND <> 'BRAND NOT KNOWN'

GROUP BY p.BRAND

ORDER BY receipt\_count DESC;

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

SELECT TOP 5 p.BRAND, SUM(t.FINAL\_SALE) AS total\_sales

FROM Transactions t

JOIN Users u ON t.USER\_ID = u.ID

JOIN Products p ON t.BARCODE = p.BARCODE

WHERE u.CREATED\_DATE <= DATEADD(MONTH, -6, GETDATE())

GROUP BY p.BRAND

ORDER BY total\_sales DESC;

**Open-ended questions:**

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

**Assumption**: BRAND NOT KNOWN to be excluded from leading brand as it represents the BRANDS which are not clearly specified, so it's high volume of entries cannot be considered relevant as top brand.

SELECT

TOP 1 BRAND,

COUNT(\*) AS Product\_Count

FROM

Products

WHERE

CATEGORY\_3 IN ('Dip Mixes', 'Salsa')

AND BRAND IS NOT NULL

AND BRAND <> 'BRAND NOT KNOWN'

GROUP BY

BRAND

ORDER BY

Product\_Count DESC;