* **What are the top 5 brands by receipts scanned for most recent month?**

SELECT b.brand\_name, COUNT(r.\_id) AS receipt\_count

FROM receipts r

JOIN brands b ON r.brand\_id = b.\_id

WHERE r.purchase\_date >= DATE\_TRUNC('month', CURRENT\_DATE) - INTERVAL '1 month'

AND r.purchase\_date < DATE\_TRUNC('month', CURRENT\_DATE)

GROUP BY b.brand\_name

ORDER BY receipt\_count DESC

LIMIT 5;

* **How does the ranking of the top 5 brands by receipts scanned for the recent month compare to the ranking for the previous month?**

ITH recent\_month AS (

SELECT b.brand\_name, COUNT(r.\_id) AS receipt\_count

FROM receipts r

JOIN brands b ON r.brand\_id = b.\_id

WHERE r.purchase\_date >= DATE\_TRUNC('month', CURRENT\_DATE) - INTERVAL '1 month'

AND r.purchase\_date < DATE\_TRUNC('month', CURRENT\_DATE)

GROUP BY b.brand\_name

),

previous\_month AS (

SELECT b.brand\_name, COUNT(r.\_id) AS receipt\_count

FROM receipts r

JOIN brands b ON r.brand\_id = b.\_id

WHERE r.purchase\_date >= DATE\_TRUNC('month', CURRENT\_DATE) - INTERVAL '2 months'

AND r.purchase\_date < DATE\_TRUNC('month', CURRENT\_DATE) - INTERVAL '1 month'

GROUP BY b.brand\_name

)

SELECT rm.brand\_name, rm.receipt\_count AS recent\_count, pm.receipt\_count AS previous\_count

FROM recent\_month rm

LEFT JOIN previous\_month pm ON rm.brand\_name = pm.brand\_name

ORDER BY recent\_count DESC

LIMIT 5;

* **When considering *average spend* from receipts with 'rewardsReceiptStatus’ of ‘Accepted’ or ‘Rejected’, which is greater?**

SELECT rewardsReceiptStatus, AVG(totalSpent) AS avg\_spent

FROM receipts

WHERE rewardsReceiptStatus IN ('Accepted', 'Rejected')

GROUP BY rewardsReceiptStatus;

* **When considering *total number of items purchased* from receipts with 'rewardsReceiptStatus’ of ‘Accepted’ or ‘Rejected’, which is greater?**

SELECT rewardsReceiptStatus, SUM(totalItems) AS total\_items

FROM receipts

WHERE rewardsReceiptStatus IN ('Accepted', 'Rejected')

GROUP BY rewardsReceiptStatus;

* **Which brand has the most *spend* among users who were created within the past 6 months?**

SELECT b.brand\_name, SUM(r.totalSpent) AS total\_spend

FROM receipts r

JOIN users u ON r.user\_id = u.\_id

JOIN brands b ON r.brand\_id = b.\_id

WHERE u.createdDate >= CURRENT\_DATE - INTERVAL '6 months'

GROUP BY b.brand\_name

ORDER BY total\_spend DESC

LIMIT 1;

* **Which brand has the most *transactions* among users who were created within the past 6 months?**

SELECT b.brand\_name, COUNT(r.\_id) AS transaction\_count

FROM receipts r

JOIN users u ON r.user\_id = u.\_id

JOIN brands b ON r.brand\_id = b.\_id

WHERE u.createdDate >= CURRENT\_DATE - INTERVAL '6 months'

GROUP BY b.brand\_name

ORDER BY transaction\_count DESC

LIMIT 1;